

TCEQ Docket Number 2006-1889-MWD

CHIEF OLERKS OFFICE

Application by

§ Before the

Rancho del Lago, Inc.

§ TEXAS COMMISSION ON

For Permit No. WQ 0014615001

ENVIRONMENTAL QUALITY

EXECUTIVE DIRECTOR'S RESPONSE TO HEARING REQUESTS

§

I. Introduction

The Executive Director of the Texas Commission on Environmental Quality (TCEQ or commission) files this Response to Hearing Requests (Response) on the application by Rancho del Lago, Inc. (Rancho) for a new Permit Number WQ 0014615001. Timely hearing requests were received from the following individuals:

Save Our Springs Alliance, on behalf of Ron Harris

Attached for Commission consideration are the following:

Attachment A - Technical Summary & Draft Permit

Attachment B – Executive Director's Response to Public Comment (RTC)

Attachment C - Map and Diagram of the Facility Site

Attachment D - Compliance History

Copies were also provided to all parties. The RTC was previously mailed by the Office of the Chief Clerk to all persons on the mailing list.

II. Facility Description

The Applicant has applied to the TCEQ for a new permit that would authorize the discharge of treated domestic wastewater at a daily average flow not to exceed 100,000 gallons per day (gpd) in the interim I phase, 200,000 gpd in the interim two phase, and 400,000 gpd via surface irrigation of 100 acres of public access landscape and a golf course. The wastewater treatment facility will serve a residential subdivision.

The Rockin' J Ranch Subdivision wastewater treatment facility will consist of an activated sludge process plant using the complete mix mode in all phases. The interim I phase will include a bar screen, aeration basin, final clarifier, and chlorine contact chamber. The interim II phase will include an additional aeration basin, and the final phase will include two more additional aeration basins (for a total of four aeration basins) and an additional final clarifier as well. The facility will also include one storage pond with a total surface area of 13.5 acres and a total

capacity of 137.2 acre-feet for storage of treated effluent prior to irrigation. The facility has not yet been constructed.

This permit will not authorize a discharge of pollutants into water in the state. The wastewater treatment facilities will be located approximately 3.9 miles southeast of the intersection of State Highway 281 and Farm-to-Market Road 32 in Blanco County, Texas. The disposal site will be located approximately 3.2 miles southeast of the intersection State Highway 281 and Farm-to-Market Road 32 in Blanco County, Texas. The facility and disposal site are located in the drainage basin of Upper Blanco River in Segment No. 1813 of the Guadalupe River Basin.

III. Procedural Background

The permit application for a new permit was received on April 18, 2005 and declared administratively complete on June 27, 2005. The Notice of Receipt and Intent to Obtain a Water Quality Permit (NORI) was published on July 27, 2005 in the *Blanco County News*. The Notice of Application and Preliminary Decision (NAPD) for a Water Quality Permit was published on February 1, 2006 in the *Blanco County News*. The public comment period ended on March 3, 2006. The Executive Director's Response to Public Comment (RTC) was filed on September 21, 2006, and the period for requesting reconsideration or a contested case hearing ended on October 28, 2006. In a letter dated March 3, 2006, Save Our Springs Alliance (SOSA) filed comments and hearing requests on behalf of Shirley Beck and Ron Harris. Shirley Beck filed a written withdrawal letter on September 25, 2006, as did SOSA on Shirley Beck's behalf on September 21, 2006. On February 6, 2007, TCEQ received a letter from SOSA, signed by Sarah Baker, formally withdrawing representation of counsel for Ron Harris. Since this application was administratively complete after September 1, 1999, it is subject to House Bill 801 (76th Legislature, 1999).

IV. The Evaluation Process for Hearing Requests

A. Responses to Requests

The executive director, the public interest counsel, and the Applicant may submit written responses to hearing requests.

Responses to hearing requests must specifically address:

- (1) whether the requestor is an affected person;
- (2) which issues raised in the hearing request are disputed;
- (3) whether the dispute involves questions of fact or of law;
- (4) whether the issues were raised during the public comment period;

- whether the hearing request is based on issues raised solely in a public comment withdrawn by the commenter in writing by filing a withdrawal letter with the chief clerk prior to the filing of the Executive Director's Response to Comment;
- (6) whether the issues are relevant and material to the decision on the application; and
- (7) a maximum expected duration for the contested case hearing.

30 TAC § 55.209(e).

B. Hearing Request Requirements

In order for the commission to consider a hearing request, the commission must first determine whether the request meets certain requirements.

A hearing request must substantially comply with the following:

- give the time, address, daytime telephone number, and where possible, fax number of the person who files the request. If the request is made by a group or association, the request must identify one person by name, address, daytime telephone number, and where possible, fax number, who shall be responsible for receiving all official communications and documents for the group;
- identify the person's personal justiciable interest affected by the application, including a brief, but specific, written statement explaining in plain language the requestor's location and distance relative to the proposed facility or activity that is the subject of the application and how and why the requestor believes he or she will be adversely affected by the proposed facility or activity in a manner not common to members of the general public;
- (3) request a contested case hearing;
- (4) list all relevant and material disputed issues of fact that were raised during the public comment period and that are the basis of the hearing request. To facilitate the commission's determination of the number and scope of issues to be referred to hearing, the requestor should, to the extent possible, specify any of the executive director's responses to comments that the requestor disputes and the factual basis of the dispute and list any disputed issues of law or policy; and
- (5) provide any other information specified in the public notice of application.

30 TAC § 55.201(d).

C. Requirement that Requestor be an "Affected Person"

In order to grant a contested case hearing, the commission must determine that a requestor is an "affected person."

(a) For any application, an affected person is one who has a personal justiciable interest related to a legal right, duty, privilege, power, or economic interest

affected by the application. An interest common to members of the general public does not quality as a personal justiciable interest.

- (b) Governmental entities, including local governments and public agencies with authority under state law over issues raised by the application may be considered affected persons.
- (c) In determining whether a person is an affected person, all factors shall be considered, including, but not limited to, the following:
 - (1) whether the interest claimed is one protected by the law under which the application will be considered;
 - (2) distance restrictions or other limitations imposed by law on the affected interest;
 - (3) whether a reasonable relationship exists between the interest claimed and the activity regulated;
 - (4) likely impact of the regulated activity on the health and safety of the person, and on the use of property of the person;
 - (5) likely impact of the regulated activity on use of the impacted natural resource by the person; and
 - (6) for governmental entities, their statutory authority over or interest in the issues relevant to the application.

30 TAC § 55.203.

D. Additional Requirements if Requestor is a Group or Association

A group or association may request a contested case hearing only if the group or association meets all of the following requirements:

- one or more members of the group or association would otherwise have standing to request a hearing in their own right;
- (2) the interests the group or association seeks to protect or germane to the organization's purpose; and
- (3) neither the claim asserted nor the relief requested requires the participation of the individual members in the case.

30 TAC § 55.205(a).

E. Referral to the State Office of Administrative Hearings

When the commission grants a request for a contested case hearing, the commission issues an order specifying the issues to be referred to SOAH.

The commission may not refer an issue to SOAH for a contested case hearing unless the commission determines that the issue:

- (1) involves a disputed question of fact;
- (2) was raised during the public comment period; and
- (3) is relevant and material to the decision on the application.

30 TAC § 50.115(c).

V. Analysis of the Requests

A. Analysis of the Hearing Requests

1. Whether the Requestor Complied With 30 TAC §§ 55.201(c) and (d)

Ron Harris, 301 Bent Tree Ct., Austin, TX 78746, through SOSA, represented by Sarah Baker, timely submitted a written CCH request, dated March 3, 2006, that requested a contested case hearing, included relevant contact information, and raised disputed issues.

The Executive Director concludes that this CCH request substantially complies with the requirements of 30 TAC Section 55.201 (c) and (d).

2. Whether the Requestor Met the Requirements of an Affected Person

30 TAC Section 55.205 specifies the requirements a group or association must meet to request a contested case hearing. SOSA does not state that it falls under 30 TAC Section 55.205; nor does it claim associational standing. Rather, SOSA claims to submit its request for contested case hearing "on behalf of" Shirley Beck and Ron Harris. Accordingly, affected person analysis should be conducted under 30 TAC 55.203. Because SOSA, in its September 21, 2006, letter withdraw for Shirley Beck, and in its February 6, 2007, letter formally withdrew as representation of counsel for Ron Harris, Ron Harris remains the sole hearing requestor.

Ron Harris appears to be an affected person in his own right. The March 3, 2006, letter from SOSA states that Mr. Harris is an adjacent, downstream landowner. Mr. Harris is on the affected landowners list provided by the Applicant and owns land within 2000 feet from the treatment plant and holding basin, therefore he may be impacted by the regulated activity. Based on Mr. Harris' proximity to the treatment plant and facility, he could be personally affected by this permit.

The Executive Director concludes that Ron Harris is an affected person under 30 TAC § 55.203.

C. Whether the Issues Raised are Referable to SOAH for a Contested Case Hearing

The following is an analysis of the issues raised in Mr. Harris' CCH request. All issues noted below are disputed, were raised during the public comment period, and were not withdrawn.

Whether issuance of the draft permit should be delayed until discrepancies in maps and plats filed with Blanco County and those contained in the application to TCEQ can be considered. The hearing requestor refers to differences in number of lot and Living Unit Equivalents and the exact location of the wastewater facilities.

This issue is not relevant and material to the decision on the permit application. The Applicant will be required to meet the requirements in the permit, if issued. These considerations are not reviewed when determining whether to authorize a wastewater treatment plant.

The Executive Director concludes that this issue is not referable to SOAH because the issue is not relevant and material to the decision on the permit application.

ISSUE 2: Whether an alleged uncertainty over the exact location for the proposed irrigation fields, treatment plant site, and holding ponds due to the Applicant's different proposals in different jurisdictions warrant new soil analyses, slope information, and vegetative analyses.

This issue is not relevant and material to the decision on the permit application. These considerations are not reviewed when determining whether to authorize a wastewater treatment plant. The Applicant will be required to comply with the permit, if issued, based on information contained in the application.

The Executive Director concludes that this issue is not referable to SOAH because the issue is not relevant and material to the decision on the permit application.

ISSUE 3: Whether the spring on Ms. Beck's property is within the required 500 feet buffer zone of the Applicant's proposed irrigation fields and could create a hydrological connectivity to groundwater.

This issue is within TCEQ's jurisdiction and is relevant or material to TCEQ's decision on the permit application. The issue involves a question of fact, is disputed, was raised during the public comment period, and was not withdrawn.

The Executive Director concludes that this issue is referable to SOAH because it meets the relevant criteria.

Whether the proximity to Mr. Harris' property of the treatment plant and holding pond will subject him to nuisance odors from the facility.

This issue is within TCEQ's jurisdiction and is relevant or material to TCEQ's decision on the permit application. The issue involves a question of fact, is disputed, was raised during the public comment period, and was not withdrawn.

The Executive Director concludes that this issue is referable to SOAH because it meets the relevant criteria.

ISSUE 5: Whether the proximity to Mr. Harris' property of the treatment plant and holding pond will subject him to nuisance light and noise from the facility.

This issue is not relevant and material to the decision on the permit application. These considerations are not reviewed when determining whether to authorize a wastewater treatment plant.

The Executive Director concludes that this issue is not referable to SOAH because the issue is not relevant and material to the decision on the permit application.

ISSUE 6: Whether the practice of irrigating wastewater on a golf course, when combined with landscaping fertilizers and pesticides, may exponentially increase the pollution risks when the soils are over-watered and thereby risk polluting surface and groundwater.

This issue is not relevant and material to the decision on the permit application. TCEQ does not regulate fertilizer. The Applicant will be required to meet the requirements in the permit, if issued. These considerations are not reviewed when determining whether to authorize a wastewater treatment plant.

The Executive Director concludes that this issue is not referable to SOAH because the issue is not relevant and material to the decision on the permit application.

ISSUE 7: Whether improper use of maintenance machinery onsite could lead to broken sprinkler heads and irrigation lines, causing oversaturation of soils and untreated runoff.

This issue is not relevant and material to the decision on the permit application. These considerations are not reviewed when determining whether to authorize a wastewater treatment plant. These are operational and compliance issues and are resolved through the enforcement process.

The Executive Director concludes that this issue is not referable to SOAH because the issue is not relevant and material to the decision on the permit application.

ISSUE 8: Whether the draft permit should be modified to incorporate alarms and automatic notification for high water levels in the effluent storage tank or pump disablement.

This issue is not relevant and material to the decision on the permit application. 30 TAC Chapter 317 provides design criteria that a permittee must meet after the permit is issued. These considerations are not reviewed when determining whether to authorize a wastewater treatment plant.

The Executive Director concludes that this issue is not referable to SOAH because the issue is not relevant and material to the decision on the permit application.

ISSUE 9: Whether increased traffic resulting from hauling sludge to another location not owned by the Applicant will negatively impact neighboring landowners, namely, Mr. Ron Harris, and pose risks their health and safety.

This issue is not relevant and material to the decision on the permit application. TCEQ does not consider traffic in its determination of whether to issue a water quality permit. These considerations are not reviewed when determining whether to authorize a wastewater treatment plant.

The Executive Director concludes that this issue is not referable to SOAH because the issue is not relevant and material to the decision on the permit application.

ISSUE 10: Whether the 50 foot buffer zone in Special Provision 18 is an adequate buffer zone between the proposed irrigation site and the Kentucky Branch Creek, which flows directly through the Applicant's proposed irrigation areas, to allow for proper attenuation of effluent from pollution.

This issue is within TCEQ's jurisdiction and is relevant or material to TCEQ's decision on the permit application. The issue involves a question of fact, is disputed, was raised during the public comment period, and was not withdrawn.

The Executive Director concludes that this issue is referable to SOAH because it meets the relevant criteria.

ISSUE 11: Whether Applicant has demonstrated the technical or managerial expertise to maintain the wastewater system.

This issue is not relevant and material to the decision on the permit application. The permittee must provide that the wastewater treatment plant is operated by a licensed operator. These considerations are not reviewed when determining whether to authorize a wastewater treatment plant.

The Executive Director concludes that this issue is not referable to SOAH because the issue is not relevant and material to the decision on the permit application.

ISSUE 12: Whether the Applicant has sufficient revenue stream and/or dedicated funds to assure fiscal capability to carry out the permit requirements.

This issue is not relevant and material to the decision on the permit application. These considerations are not reviewed when determining whether to authorize a wastewater treatment plant.

The Executive Director concludes that this issue is not referable to SOAH because the issue is not relevant and material to the decision on the permit application.

ISSUE 13: Whether the irrigation practices proposed in the application and set out in the draft permit are appropriate for the disposal of treated effluent. The hearing requestor raises irrigation issues including soil depth and type, dispersal area, agronomy, adequate monitoring, nitrogen concentrations, and whether distribution will be uniform.

This issue is within TCEQ's jurisdiction and is relevant or material to TCEQ's decision on the permit application. The issue involves a question of fact, is disputed, was raised during the public comment period, and was not withdrawn.

The Executive Director concludes that this issue is referable to SOAH because it meets the relevant criteria.

ISSUE 14: Whether the Applicant submitted an adequate monthly water balance in its application.

This issue is within TCEQ's jurisdiction and is relevant or material to TCEQ's decision on the permit application. The issue involves a question of fact, is disputed, was raised during the public comment period, and was not withdrawn.

The Executive Director concludes that this issue is referable to SOAH because it meets the relevant criteria.

ISSUE 15: Whether the specific hardware that would be used to execute the irrigation process, will be designed and controlled to provide uniform coverage over the dispersal area at the proper application rates and how the application rates would be determined so that runoff and pooling would be prevented.

This issue is not relevant and material to the decision on the permit application. These considerations are not reviewed when determining whether to authorize a wastewater treatment plant. This matter can be dealt with through enforcement.

The Executive Director concludes that this issue is not referable to SOAH because the issue is not relevant and material to the decision on the permit application.

ISSUE 16: Whether the design features and level of management of the system will minimize collection main leak, manhole overflow, and lift station failure.

This issue is not relevant and material to the decision on the permit application. These considerations are not reviewed when determining whether to authorize a wastewater treatment plant. Design criteria are set out in 30 TAC Chapter 317 and the Applicant must comply with these criteria in designing its collection system once the permit is issued.

The Executive Director concludes that this issue is not referable to SOAH because the issue is not relevant and material to the decision on the permit application.

ISSUE 17: Whether the Applicant and TCEQ should be required to consider alternative dispersal systems, given the speculative nature of the proposed golf course, which if not completed, could result in a nuisance from the effluent.

This issue is not relevant and material to the decision on the permit application. The Applicant will not be able to land apply treated effluent unless there is sufficient area and proper conditions. Alternative disposal systems are not reviewed when determining whether to authorize a wastewater treatment plant.

The Executive Director concludes that this issue is not referable to SOAH because the issue is not relevant and material to the decision on the permit application.

ISSUE 18: Whether the proposed treatment process will operate so as to consistently and reliably produce any given level of effluent in the face of diurnal flow variations and during periods when considerably less than full design flow is being received, when there is no operating theory for activated sludge that does not assume steady state flow, and given that the system would not receive steady state flow, there is no theoretical basis for expecting any specific level of performance.

This issue is not relevant and material to the decision on the permit application. The proposed treatment is proven to be reliable and is typically used to treat domestic wastewater. These systems are recognized for use and the design criteria for such a system are set out in 30 TAC Chapter 317.

The Executive Director concludes that this issue is not referable to SOAH because the issue is not relevant and material to the decision on the permit application.

ISSUE 19: Whether the Applicant not having a wastewater CCN renders the wastewater permit application moot.

This issue is not relevant and material to the decision on the permit application. These considerations are not reviewed when determining whether to authorize a wastewater treatment plant.

The Executive Director concludes that this issue is not referable to SOAH because the issue is not relevant and material to the decision on the permit application.

VI. Duration of the Contested Case Hearing

The Executive Director recommends that the duration for a contested case hearing on this matter, should there be one, between preliminary hearing and the presentation of a proposal for decision before the commission, be **six** (6) **months**. This time period begins with the preliminary hearing and concludes with presentation of a proposal for decision before the Commission.

VII. Executive Director's Recommendation

The Executive Director recommends the following actions by the Commission:

- A. Find that Mr. Harris has shown standing and is an affected person.
- B. .Refer the following issues to SOAH for a proceeding of six months duration:
 - 1. Whether the spring on Ms. Beck's property is within the required 500 feet buffer zone of the Applicant's proposed irrigation fields and could create a hydrological connectivity to groundwater.
 - 2. Whether the proximity to Mr. Harris' property of the treatment plant and holding pond will subject him to nuisance odors from the facility.
 - 3. Whether the 50 foot buffer zone in Special Provision 18 is an adequate buffer zone between the proposed irrigation site and the Kentucky Branch Creek, which flows directly through the Applicant's proposed irrigation areas, to allow for proper attenuation of effluent from pollution.
 - 4. Whether the irrigation practices proposed in the application and set out in the draft permit are appropriate for the disposal of treated effluent. The hearing requestor raises irrigation issues including soil depth and type, dispersal area, agronomy, adequate monitoring, nitrogen concentrations, and whether distribution will be uniform.
 - 5. Whether the Applicant submitted an adequate monthly water balance in its application.

Respectfully submitted,

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Glenn Shankle, Executive Director

Stephanie Bergeron Perdue, Deputy Director Office of Legal Services

Robert Martinez, Director

Environmental Law Division

Christiaan Siano, Staff Attorney

Environmental Law Division

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REPRESENTING THE EXECUTIVE DIRECTOR OF THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

CERTIFICATE OF SERVICE

I certify that on February 12, 2007, the original and eleven copies of the "Executive Director's Response to Hearing Requests" for Permit No. WQ 0014615001, were filed with the Texas Commission on Environmental Quality's Office of the Chief Clerk, and a complete copy was served to all persons listed on the attached mailing list via hand delivery, facsimile transmission, inter-agency mail, or by deposit in the U.S. mail.

> Christiaan Siano, Staff Attorney Environmental Law Division

State Bar No. 24051335

MAILING LIST RANCHO DEL LAGO, INC. DOCKET NO. 2006-1889-MWD: PERMIT NO. WQ0014615001

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Sarah Baker

Save Our Springs Alliance

Behalf of Shirley Beck & Ron Harris

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Ron Harris

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WITHDRAWAL OF REQUEST:

Shirley Beck

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Blanco, Texas 78606-5213

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TECHNICAL SUMMARY AND EXECUTIVE DIRECTOR'S PRELIMINARY DECISION

DESCRIPTION OF APPLICATION

Applicant:

Rancho Del Lago, Inc.; Permit No. WQ0014615001

Regulated Activity:

Domestic Wastewater Permit

Type of Application:

New Permit

Request:

New Permit

Authority:

Texas Water Code §26.027; 30 TAC Chapters 305, 309, 312, 319, and 30; and Commission

policies.

XECUTIVE DIRECTOR RECOMMENDATION

The executive director has made a preliminary decision that this permit, if issued, meets all statutory and regulatory requirements. The proposed permit includes an expiration date of February 1, 2010, according to 30 TAC Section 305.127(1)(C)(III), Conditions to be Determined for Individual Permits.

REASON FOR PROJECT PROPOSED

Rancho Del Lago, Inc. has applied to the Texas Commission on Environmental Quality (TCEQ) for a new permit, Permit No. WQ0014615001, to authorize the disposal of treated domestic wastewater at a daily average flow not to exceed 0.10 million gallons per day (MGD) in the Interim I Phase, 0.20 MGD in the Interim II Phase, and 0.40 MGD in the Final Phase via surface irrigation of 100 acres of public access landscape and a golf course. The wastewater treatment facility will serve a residential subdivision.

PROJECT DESCRIPTION AND LOCATION

The Rockin' J Ranch Subdivision Wastewater Treatment Facility will consist of an activated sludge process plant using the complete mix mode in all phases. Treatment units in the Interim I Phase will include a bar screen, aeration basin, final clarifier and chlorine contact chamber. Treatment units in the Interim II Phase will include a bar screen, two aeration basins, final clarifier and chlorine contact chamber. Treatment units in the Final Phase will include a bar screen, four aeration basins, two final clarifiers and chlorine contact chamber. The facility includes one storage pond with a total surface area of 13.5 acres and total capacity of 137.2 acre-feet for storage of treated effluent prior to irrigation. The facility has not been constructed.

The draft permit authorizes the disposal of sludge at a TCEQ authorized land application site, or co-disposal landfill.

The wastewater treatment facilities will be located approximately 3.9 miles southeast of the intersection of State Highway 281 and Farm-to-Market Road 32 in Blanco County, Texas. The disposal site will be located approximately 3.2 miles southeast of the intersection State Highway 281 and Farm-to-Market Road 32 in Blanco County, Texas.

The disposal site is located in the drainage basin of Upper Blanco River in Segment No. 1813 of the Guadalupe River Basin. No discharge of pollutants into water in the State is authorized by this permit.

Rancho Del Lago, Inc. Permit No. WQ0014615001
Technical Summary and Executive Director's Preliminary Decision

SUMMARY OF EFFLUENT DATA

N/A - No self-reporting data is available.

PROPOSED PERMIT CONDITIONS

The draft permit authorizes the disposal of treated domestic wastewater effluent at a daily average flow not to exceed 0.10 MGD in the Interim I Phase, 0.20 MGD in the Interim II Phase, and 0.40 MGD in the Final Phase via surface irrigation of 100 acres of public access landscape and a golf course. The facility will include one storage pond with a total surface area of 13.5 acres and total capacity of 137.2 acre-feet for storage of treated effluent prior to irrigation. Application rates to the irrigated land shall not exceed 1.12 acre-feet per year per acre irrigated in the Interim II Phase, 2.24 acre-feet per year per acre irrigated in the Final Phase. The irrigated crops include bermuda grass, winter rye and native vegetation. The effluent limitations in the draft permit, based on a daily average, are 10 mg/l CBOD₅, 15 mg/l TSS, and 3 mg/l NH₃-N. The effluent shall contain a chlorine residual of at least 1.0 mg/l after a detention time of at least 20 minutes based on peak flow.

The permittee shall comply with the requirements of 30 TAC Section 309.13 (a) through (d). In addition, by ownership of the required buffer zone area, the permittee shall comply with the requirements of 30 TAC Section 309.13(e).

The draft permit includes Sludge Provisions according to the requirements of 30 TAC Chapter 312, Sludge Use, Disposal and Transportation. The draft permit authorizes the disposal of sludge at a TCEQ authorized land application site, or co-disposal landfill.

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SUMMARY OF CHANGES FROM APPLICATION

Effluent application rates for the interim phases are indicated in the draft permit.

SUMMARY OF CHANGES FROM EXISTING PERMIT

N/A. New Permit.

BASIS FOR PROPOSED DRAFT PERMIT

The following items were considered in developing the proposed permit draft:

- 1. Application received April 18, 2005 and additional information received June 20, 2005, August 19, 2005 and October 19, 2005.
- 2. Interoffice Memoranda from the Water Quality Assessment Team, Water Quality Assessments Section, and Water Quality Division.

PROCEDURES FOR FINAL DECISION

When an application is declared administratively complete, the Chief Clerk sends a letter to the applicant advising the applicant to publish the Notice of Receipt of Application and Intent to Obtain Permit in the newspaper. In addition, the Chief Clerk instructs the applicant to place a copy of the application in a public place for review and copying in the county where the facility is or will be located. This application will be in a public place throughout the comment period. The Chief Clerk also mails this notice to any interested persons and, if required, to landowners identified in the permit application. This notice informs the public about the application, and provides that an interested person may file comments on the application or request a contested case hearing or a public meeting.

Rancho Del Lago, Inc. Permit No. WQ0014615001 Technical Summary and Executive Director's Preliminary Decision

Once a draft permit is completed, it is sent, along with the Executive Director's preliminary decision, as contained in the technical summary or fact sheet, to the Chief Clerk. At that time, Notice of Application and Preliminary Decision will be mailed to the same people and published in the same newspaper as the prior notice. This notice sets a deadline for making public comments. The applicant must place a copy of the Executive Director's preliminary decision and draft permit in the public place with the application. This notice sets a deadline for public comment.

Any interested person may request a public meeting on the application until the deadline for filing public comments. A public meeting is intended for the taking of public comment, and is not a contested case proceeding.

After the public comment deadline, the Executive Director prepares a response to all significant public comments on the application or the draft permit raised during the public comment period. The Chief Clerk then mails the Executive Director's Response to Comments and Final Decision to people who have filed comments, requested a contested case hearing, or requested to be on the mailing list. This notice provides that if a person is not satisfied with the Executive Director's response and decision, they can request a contested case hearing or file a request to reconsider the Executive Director's decision within 30 days after the notice is mailed.

The Executive Director will issue the permit unless a written hearing request or request for reconsideration is filed ithin 30 days after the Executive Director's Response to Comments and Final Decision is mailed. If a hearing request or request for reconsideration is filed, the Executive Director will not issue the permit and will forward the application and request to the TCEQ Commissioners for their consideration at a scheduled Commission meeting. If a contested case hearing is held, it will be a legal proceeding similar to a civil trial in state district court.

If the Executive Director calls a public meeting or the Commission grants a contested case hearing as described above, the Commission will give notice of the date, time, and place of the meeting or hearing. If a hearing request or request for reconsideration is made, the Commission will consider all public comments in making its decision and shall either adopt the Executive Director's response to public comments or prepare its own response.

Date

For additional information about this application contact Julian D. Centeno, Jr. at (512) 239-4608.

alian D. Centeno, Jr.	
Municipal Permits Team	
Wastewater Permitting Section (MC 148)	

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TEXAS COMMISSION ON ENVIRONMENTAL QUALITY P.O. Box 13087 Austin, Texas 78711-3087

PERMIT TO DISCHARGE WASTES

under provisions of Chapter 26 of the Texas Water Code

Permittee:

Rancho Del Lago, Inc.

P.O. Box 2202 Canyon Lake, Texas 78133-0009

Nature of Business Producing Waste: Domestic wastewater treatment operation, SIC Code 4952

General Description and Location of Waste Disposal System:

Description: The Rockin' J Ranch Subdivision Wastewater Treatment Facility will consist of an activated sludge process plant using the complete mix mode in all phases. Treatment units in the Interim I Phase will include a bar screen, aeration basin, final clarifier and chlorine contact chamber. Treatment units in the Interim II Phase will include a bar screen, two aeration basins, final clarifier and chlorine contact chamber. Treatment units in the Final Phase will include a bar screen, four aeration basins, two final clarifiers and chlorine contact chamber. The facility includes one storage pond with a total surface area of 13.5 acres and total capacity of 137.2 acre-feet for storage of treated effluent prior to irrigation. The permittee is authorized to dispose of treated domestic wastewater effluent at a daily average flow not to exceed 0.10 million gallons per day (MGD) in the Interim I Phase, 0.20 MGD in the Interim II Phase and 0.40 MGD in the Final Phase via surface irrigation of 100 acres of public access landscape and a golf course. Application rates to the irrigated land shall not exceed 1.12 acre-feet per year per acre irrigated in the Interim II Phase, and 4.48 acre-feet per year per acre irrigated in the Final Phase. The irrigated crops include bermuda grass, winter rye and native vegetation.

Location: The wastewater treatment facilities will be located approximately 3.9 miles southeast of the intersection of State Highway 281 and Farm-to-Market Road 32 in Blanco County, Texas. The disposal site will be located approximately 3.2 miles southeast of the intersection State Highway 281 and Farm-to-Market Road 32 in Blanco County, Texas. (See Attachment A.)

Drainage Area: The disposal site is located in the drainage basin of Upper Blanco River in Segment No. 1813 of the Guadalupe River Basin. No discharge of pollutants into water in the State is authorized by this permit.

This permit and the authorization contained herein shall expire at midnight on February 1, 2010.

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For the Commission		

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Conditions of the Permit: No discharge of pollutants into water in the State is authorized.

A. Effluent Limitations

Character: Treated Domestic Sewage Effluent

<u>Volume</u>: Daily Average Flow - 0.10 MGD in the Interim I Phase

Daily Average Flow - 0.20 MGD in the Interim II Phase

Daily Average Flow - 0.40 MGD In the Final Phase MGD from the treatment

system

Quality: The following effluent limitations shall be required:

		Effluent Conce	ntrations	
		(Not to Exceed)	Aug 1	gal to that
	Daily	7-Day	Daily	Single
<u>Parameter</u>	Average	<u>Average</u>	<u>Maximum</u>	<u>Grab</u>
	mg/l	mg/l	mg/l	mg/l
Carbonaceous				
Biochemical Oxygen	10 -11	N/A	N/A	35
Demand (5-day)				
		The Barrier Stage of	11 C - 11 DO 1	
Total Suspended Solids	15	N/A	N/A	60
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The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units.

The effluent shall be chlorinated in a chlorine contact chamber to a residual of 1.0 mg/l with a minimum detention time of 20 minutes. If the effluent is to be transferred to a holding pond or tank, re-chlorination prior to the effluent being delivered into the irrigation system will be required. A trace chlorine residual shall be maintained in the effluent at the point of irrigation application.

B. Monitoring Requirements:

<u>Parameter</u>	Monitoring Frequency	Sample Type
Flow	Five/week	Instantaneous
Carbonaceous	One/week	Grab
Biochemical Oxygen Dema	nd (5-day)	and the state of the graph of the first of the state of t
Total Suspended Solids	One/week	Grab
Ammonia Nitrogen	One/week	Grab
$_{4}$ pH $_{2}$, $_{1}$, $_{2}$, $_{3}$, $_{4}$, $_{4}$, $_{4}$	One/month	Grab
Chlorine Residual	Five/week	Grab

The monitoring shall be done after the final treatment unit and prior to storage of the treated effluent. If the effluent is land applied directly from the treatment system, monitoring shall be done after the final treatment unit and prior to land application. These records shall be maintained on a monthly basis and be available at the plant site for inspection by authorized representatives of the Commission for at least three years.

STANDARD PERMIT CONDITIONS

This permit is granted in accordance with the Texas Water Code and the rules and other Orders of the Commission and the laws of the State of Texas.

DEFINITIONS

All definitions in Section 26.001 of the Texas Water Code and 30 TAC Chapter 305 shall apply to this permit and are incorporated by reference. Some specific definitions of words or phrases used in this permit are as follows:

1. Flow Measurements

- a. Daily average flow the arithmetic average of all determinations of the daily flow within a period of one calendar month. The daily average flow determination shall consist of determinations made on at least four separate days. If instantaneous measurements are used to determine the daily flow, the determination shall be the arithmetic average of all instantaneous measurements taken during that month. Daily average flow determination for intermittent discharges shall consist of a minimum of three flow determinations on days of discharge.
- b. Annual average flow the arithmetic average of all daily flow determinations taken within the preceding 12 consecutive calendar months. The annual average flow determination shall consist of daily flow volume determinations made by a totalizing meter, charted on a chart recorder and limited to major domestic wastewater discharge facilities with a 1 million gallons per day or greater permitted flow.
- c. Instantaneous flow the measured flow during the minimum time required to interpret the flow measuring device.

2. Concentration Measurements

- a. Daily average concentration the arithmetic average of all effluent samples, composite or grab as required by this permit, within a period of one calendar month, consisting of at least four separate representative measurements.
 - i. For domestic wastewater treatment plants When four samples are not available in a calendar month, the arithmetic average (weighted by flow) of all values in the previous four consecutive month period consisting of at least four measurements shall be utilized as the daily average concentration.
 - ii. For all other wastewater treatment plants When four samples are not available in a calender month, the arithmetic average (weighted by flow) of all values taken during the month shall be utilized as the daily average concentration.
- b. 7-day average concentration the arithmetic average of all effluent samples, composite or grab as required by this permit, within a period of one calendar week, Sunday through Saturday.
- c. Daily maximum concentration the maximum concentration measured on a single day, by the sample type specified in the permit, within a period of one calender month.

3. Sample Type

- a. Composite sample For domestic wastewater, a composite sample is a sample made up of a minimum of three effluent portions collected in a continuous 24-hour period or during the period of daily discharge if less than 24 hours, and combined in volumes proportional to flow, and collected at the intervals required by 30 TAC § 319.9 (a). For industrial wastewater, a composite sample is a sample made up of a minimum of three effluent portions collected in a continuous 24-hour period or during the period of daily discharge if less than 24 hours, and combined in volumes proportional to flow, and collected at the intervals required by 30 TAC § 319.9 (b).
- b. Grab sample an individual sample collected in less than 15 minutes.
- 4. Treatment Facility (facility) wastewater facilities used in the conveyance, storage, treatment, recycling, reclamation and/or disposal of domestic sewage, industrial wastes, agricultural wastes, recreational wastes, or other wastes including sludge handling or disposal facilities under the jurisdiction of the Commission.

- 5. The term "sewage sludge" is defined as solid, semi-solid, or liquid residue generated during the treatment of domestic sewage in 30 TAC Chapter 312. This includes the solids which have not been classified as hazardous waste separated from wastewater by unit processes.
- 6. Bypass the intentional diversion of a waste stream from any portion of a treatment facility.

MONITORING REQUIREMENTS

1. Monitoring Requirements

Monitoring results shall be collected at the intervals specified in the permit. Unless otherwise specified in this permit or otherwise ordered by the Commission, the permittee shall conduct effluent sampling in accordance with 30 TAC §§ 319.4 - 319.12.

As provided by state law, the permittee is subject to administrative, civil and criminal penalties, as applicable, for negligently or knowingly violating the Texas Water Code, Chapters 26, 27, and 28, and Texas Health and Safety Code, Chapter 361, including but not limited to knowingly making any false statement, representation, or certification on any report, record or other document submitted or required to be maintained under this permit, including monitoring reports, records or reports of compliance or noncompliance, or falsifying, tampering with or knowingly rendering inaccurate any monitoring device or method required by this permit or violating any other requirement imposed by state or federal regulations.

2. Test Procedures

Unless otherwise specified in this permit, test procedures for the analysis of pollutants shall comply with procedures specified in 30 TAC §§319.11 - 319.12. Measurements, tests and calculations shall be accurately accomplished in a representative manner.

Records of Results

- a. Monitoring samples and measurements shall be taken at times and in a manner so as to be representative of the monitored activity.
- b. Except for records of monitoring information required by this permit related to the permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five years, monitoring and reporting records, including strip charts and records of calibration and maintenance, copies of all records required by this permit, and records of all data used to complete the application for this permit-shall be retained at the facility site, or shall be readily available for review by a TCEQ representative for a period of three years from the date of the record or sample, measurement, report, or application. This period shall be extended at the request of the Executive Director.
- c. Records of monitoring activities shall include the following:
 - i. date, time and place of sample or measurement;
 - ii. identity of individual who collected the sample or made the measurement.
 - iii. date and time of analysis;
 - iv. identity of the individual and laboratory who performed the analysis;
 - v. the technique or method of analysis; and
 - vi. the results of the analysis or measurement and quality assurance/quality control records.

The period during which records are required to be kept shall be automatically extended to the date of the final disposition of any administrative or judicial enforcement action that maybe instituted against the permittee.

4. Additional Monitoring by Permittee

If the permittee monitors any pollutant at the location(s) designated herein more frequently than required by this permit using approved analytical methods as specified above, all results of such monitoring shall be included in determining compliance with permit requirements.

5. Calibration of Instruments

All automatic flow measuring or recording devices and all totalizing meters for measuring flows shall be accurately calibrated by a trained person at plant start-up and as often thereafter as necessary to ensure accuracy, but not less often than annually unless authorized by the Executive Director for a longer period. Such person shall verify in writing that the device is operating properly and giving accurate results. Copies of the verification shall be retained at the facility site and/or shall be readily available for review by a TCEQ representative for a period of three years.

6. Compliance Schedule Reports

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of the permit shall be submitted no later than 14 days following each schedule date to the Regional Office and the Enforcement Division (MC 224).

7. Noncompliance Notification

- a. In accordance with 30 TAC § 305.125(9), any noncompliance which may endanger human health or safety, or the environment shall be reported by the permittee to the TCEQ. Report of such information shall be provided orally or by facsimile transmission(FAX) to the Regional Office within 24 hours of becoming aware of the noncompliance. A written submission of such information shall also be provided by the permittee to the Regional Office and the Enforcement Division (MC 224) within five working days of becoming aware of the noncompliance. The written submission shall contain a description of the noncompliance and its cause; the potential danger to human health or safety, or the environment; the period of noncompliance, including exact dates and times; if the noncompliance has not been corrected, the time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance, and to mitigate its adverse effects.
- b. The following violations shall be reported under Monitoring and Reporting Requirement 7.a.:
 - i. Unauthorized discharges as defined in Permit Condition 2(g).
 - ii. Any unanticipated bypass which exceeds any effluent limitation in the permit.
- c. In addition to the above, any effluent violation which deviates from the permitted effluent limitation by more than 40% shall be reported by the permittee in writing to the Regional Office and the Enforcement Division (MC 224) within 5 working days of becoming aware of the noncompliance.
- d. Any noncompliance other than that specified in this section, or any required information not submitted or submitted incorrectly, shall be reported to the Enforcement Division (MC 224) as promptly as possible.
- 8. In accordance with the procedures described in 30 TAC §§ 35.301 35.303 (relating to Water Quality Emergency and Temporary Orders) if the permittee knows in advance of the need for a bypass, it shall submit prior notice by applying for such authorization.
- 9. Changes in Discharges of Toxic Substances

All existing manufacturing, commercial, mining, and silvicultural permittees shall notify the Regional Office, orally or by facsimile transmission within 24 hours, and both the Regional Office and the Enforcement Division (MC 224) in writing within five (5) working days, after becoming aware of or having reason to believe:

- a. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant listed at 40 CFR Part 122, Appendix D, Tables II and III (excluding Total Phenols) which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
 - i. One hundred micrograms per liter (100 μg/L);
 - ii. Two hundred micrograms per liter (200 μ g/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 μ g/L) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;
 - iii. Five (5) times the maximum concentration value reported for that pollutant in the permit application; or
 - iv. The level established by the TCEQ.

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- b. That any activity has occurred or will occur which would result in any discharge, on a nonroutine or infrequent basis. of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels": As well give as the relative transmission for any convergence of the effect of the collection of
 - stands of the length of the policy was a policy of the Five hundred micrograms per liter (500 µg/L); One milligram per liter (1 mg/L) for antimony;

 - iii. Ten (10) times the maximum concentration value reported for that pollutant in the permit application; or
 - iv. The level established by the TCEO.

10. Signatories to Reports

All reports and other information requested by the Executive Director shall be signed by the person and in the manner required by 30 TAC § 305.128 (relating to Signatories to Reports).

PERMIT CONDITIONS

General

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- This permit is granted on the basis of the information supplied and representations made by the permittee during action on an application, and relying upon the accuracy and completeness of that information and those representations. After notice and opportunity for a hearing, this permit may be modified, suspended, or revoked, in whole or in part, in accordance with 30 TAC Chapter 305, Subchapter D, during its term for good cause including, but not limited to, the following:
 - Violation of any terms or conditions of this permit; i.
 - Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts; or
 - iii. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.
- The permittee shall furnish to the Executive Director, upon request and within a reasonable time, any information to determine whether cause exists for amending, revoking, suspending or terminating the permit. The permittee shall also furnish to the Executive Director, upon request, copies of records required to be kept by the permit.

- a. Acceptance of the permit by the person to whom it is issued constitutes acknowledgment and agreement that such person will comply with all the terms and conditions embodied in the permit, and the rules and other orders of the Commission.
- The permittee has a duty to comply with all conditions of the permit. Failure to comply with any permit condition constitutes a violation of the permit and the Texas Water Code or the Texas Health and Safety Code, and is grounds for enforcement action, for permit amendment, revocation or suspension, or for denial of a permit renewal application or an application for a permit for another facility.
- It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit.
- The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal or other permit violation which has a reasonable likelihood of adversely affecting human health or the environment.
- Authorization from the Commission is required before beginning any change in the permitted facility or activity that may result in noncompliance with any permit requirements.
- A permit may be amended, suspended and reissued, or revoked for cause in accordance with 30 TAC §§ 305.62 and 305.66 and Texas Water Code Section 7.302. The filing of a request by the permittee for a permit amendment, suspension and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

- g. There shall be no unauthorized discharge of wastewater or any other waste. For the purpose of this permit, an unauthorized discharge is considered to be any discharge of wastewater into or adjacent to water in the state at any location not permitted as an outfall or otherwise defined in the Special Provisions section of this permit.
- h. The permittee is subject to administrative, civil, and criminal penalties, as applicable, under Texas Water Code §§7.051 7.075 (relating to Administrative Penalties), 7.101 7.111 (relating to Civil Penalties), and 7.141 7.202 (relating to Criminal Offenses and Penalties).

3. Inspections and Entry

- a. Inspection and entry shall be allowed as prescribed in the Texas Water Code Chapters 26, 27, and 28, and Texas Health and Safety Code Chapter 361.
- b. The members of the Commission and employees and agents of the Commission are entitled to enter any public or private property at any reasonable time for the purpose of inspecting and investigating conditions relating to the quality of water in the state or the compliance with any rule, regulation, permit or other order of the Commission. Members, employees, or agents of the Commission and Commission contractors are entitled to enter public or private property at any reasonable time to investigate or monitor or, if the responsible party is not responsive or there is an immediate danger to public health or the environment, to remove or remediate a condition related to the quality of water in the state. Members, employees, Commission contractors, or agents acting under this authority who enter private property shall observe the establishment's rules and regulations concerning safety, internal security, and fire protection, and if the property has management in residence, shall notify management or the person then in charge of his presence and shall exhibit proper credentials. If any member, employee, Commission contractor, or agent is refused the right to enter in or on public or private property under this authority, the Executive Director may invoke the remedies authorized in Texas Water Code Section 7.002. The statement above, that Commission entry shall occur in accordance with an establishment's rules and regulations concerning safety, internal security, and fire protection, is not grounds for denial or restriction of entry to any part of the facility, but merely describes the Commission's duty to observe appropriate rules and regulations during an inspection.

4. Permit Amendment and/or Renewal

- a. The permittee shall give notice to the Executive Director as soon as possible of any planned physical alterations or additions to the permitted facility if such alterations or additions would require a permit amendment or result in a violation of permit requirements. Notice shall also be required under this paragraph when:
 - i. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements in Monitoring and Reporting Requirements No. 9;
 - ii. The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan.
- b. Prior to any facility modifications, additions, or expansions that will increase the plant capacity beyond the permitted flow, the permittee must apply for and obtain proper authorization from the Commission before commencing construction.
- c. The permittee must apply for an amendment or renewal prior to expiration of the existing permit in order to continue a permitted activity after the expiration date of the permit. If an application is submitted prior to the expiration date of the permit, the existing permit shall remain in effect until the application is approved, denied, or returned. If the application is returned or denied, authorization to continue such activity shall terminate upon the effective date of the action. If an application is not submitted prior to the expiration date of the permit, the permit shall expire and authorization to continue such activity shall terminate.
- d. Prior to accepting or generating wastes which are not described in the permit application or which would result in a significant change in the quantity or quality of the existing discharge, the permittee must report the proposed changes to the Commission. The permittee must apply for a permit amendment reflecting any necessary changes in permit conditions, including effluent limitations for pollutants not identified and limited by this permit.
- e. In accordance with the Texas Water Code § 26.029(b), after a public hearing, notice of which shall be given to the permittee, the Commission may require the permittee, from time to time, for good cause, in accordance with applicable laws, to conform to new or additional conditions.

5. Permit Transfer

- a. Prior to any transfer of this permit, Commission approval must be obtained. The Commission shall be notified in writing of any change in control or ownership of facilities authorized by this permit. Such notification should be sent to the Applications Review and Processing Team (MC 148) of the Water Quality Division.
- b. A permit may be transferred only according to the provisions of 30 TAC § 305.64 (relating to Transfer of Permits) and 30 TAC § 50.133 (relating to Executive Director Action on Application or WOMP update).
- Relationship to Hazardous Waste Activities

Barn v marchi, in it been too an artist This permit does not authorize any activity of hazardous waste storage, processing, or disposal which requires a permit or other authorization pursuant to the Texas Health and Safety Code.

7. Property Rights

de debe de la colonia de como problema de como La como de com A permit does not convey any property rights of any sort, or any exclusive privilege.

Permit Enforceability

The conditions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstances, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

Relationship to Permit Application

The application pursuant to which the permit has been issued is incorporated herein; provided, however, that in the event of a conflict between the provisions of this permit and the application, the provisions of the permit shall control.

- 10. Notice of Bankruptcv.
 - a. Each permittee shall notify the executive director, in writing, immediately following the filing of a voluntary or involuntary petition for bankruptcy under any chapter of Title 11 (Bankruptcy) of the United States Code (11 USC) by or against:
 - the permittee;
 - ii. an entity (as that term is defined in 11 USC, §101(14)) controlling the permittee or listing the permit or permittee as property of the estate; or
 - iii. an affiliate (as that term is defined in 11 USC, §101(2)) of the permittee.
 - This notification must indicate:

 i. the name of the permittee;

 ii. the name of the permittee;

 - ii. the permit number(s);
 - iii, the bankruptcy court in which the petition for bankruptcy was filed; and
 - iv. the date of filing of the petition.

OPERATIONAL REQUIREMENTS The first first contribute area and greater that is also reduce a dynamic problem, the contribute and problem is

- The permittee shall at all times ensure that the facility and all of its systems of collection, treatment, and disposal are properly operated and maintained. This includes, but is not limited to, the regular, periodic examination of wastewater solids within the treatment plant by the operator in order to maintain an appropriate quantity and quality of solids inventory as described in the various operator training manuals and according to accepted industry standards for process control. Process control, maintenance, and operations records shall be retained at the facility site, or shall be readily available for review by a TCEO representative, for a period of three years.
- Upon request by the Executive Director, the permittee shall take appropriate samples and provide proper analysis in order to demonstrate compliance with Commission rules. Unless otherwise specified in this permit or otherwise ordered by the Commission, the permittee shall comply with all applicable provisions of 30 TAC Chapter 312 concerning sewage sludge use and disposal and 30 TAC §§ 319.21 - 319.29 concerning the discharge of certain hazardous metals.

- 3. Domestic wastewater treatment facilities shall comply with the following provisions:
 - a. The permittee shall notify the Municipal Permits Team, Wastewater Permitting Section (MC 148) of the Water Quality Division, in writing, of any facility expansion at least 90 days prior to conducting such activity.
 - b. The permittee shall submit a closure plan for review and approval to the Land Application Team, Wastewater Permitting Section (MC 148) of the Water Quality Division, for any closure activity at least 90 days prior to conducting such activity. Closure is the act of permanently taking a waste management unit or treatment facility out of service and includes the permanent removal from service of any pit, tank, pond, lagoon, surface impoundment and/or other treatment unit regulated by this permit.
- 4. The permittee is responsible for installing prior to plant start-up, and subsequently maintaining, adequate safeguards to prevent the discharge of untreated or inadequately treated wastes during electrical power failures by means of alternate power sources, standby generators, and/or retention of inadequately treated wastewater.
- 5. Unless otherwise specified, the permittee shall provide a readily accessible sampling point and, where applicable, an effluent flow measuring device or other acceptable means by which effluent flow may be determined.
- 6. The permittee shall remit an annual water quality fee to the Commission as required by 30 TAC Chapter 21. Failure to pay the fee may result in revocation of this permit under Texas Water Code § 7.302(b)(6).

7. Documentation

For all written notifications to the Commission required of the permittee by this permit, the permittee shall keep and make available a copy of each such notification under the same conditions as self-monitoring data are required to be kept and made available. Except for information specified as not confidential in 30 TAC § 1.5(d), any information submitted pursuant to this permit may be claimed as confidential by the submitter. Any such claim must be asserted in the manner prescribed in the application form or by stamping the words "confidential business information" on each page containing such information. If no claim is made at the time of submission, information may be made available to the public without further notice. If the Commission or Executive Director agrees with the designation of confidentiality, the TCEQ will not provide the information for public inspection unless required by the Texas Attorney General or a court pursuant to an open records request. If the Executive Director does not agree with the designation of confidentiality, the person submitting the information will be notified.

- 8. Facilities which generate domestic wastewater shall comply with the following provisions; domestic wastewater treatment facilities at permitted industrial sites are excluded.
 - a. Whenever flow measurements for any domestic sewage treatment facility reach 75 percent of the permitted daily average or annual average flow for three consecutive months, the permittee must initiate engineering and financial planning for expansion and/or upgrading of the domestic wastewater treatment and/or collection facilities. Whenever the flow reaches 90 percent of the permitted daily average or annual average flow for three consecutive months, the permittee shall obtain necessary authorization from the Commission to commence construction of the necessary additional treatment and/or collection facilities. In the case of a domestic wastewater treatment facility which reaches 75 percent of the permitted daily average or annual average flow for three consecutive months, and the planned population to be served or the quantity of waste produced is not expected to exceed the design limitations of the treatment facility, the permittee shall submit an engineering report supporting this claim to the Executive Director of the Commission.

If in the judgement of the Executive Director the population to be served will not cause permit noncompliance, then the requirement of this section may be waived. To be effective, any waiver must be in writing and signed by the Director of the Enforcement Division (MC 149) of the Commission, and such waiver of these requirements will be reviewed upon expiration of the existing permit; however, any such waiver shall not be interpreted as condoning or excusing any violation of any permit parameter.

b. The plans and specifications for domestic sewage collection and treatment works associated with any domestic permit must be approved by the Commission, and failure to secure approval before commencing construction of such works or making a discharge is a violation of this permit and each day is an additional violation until approval has been secured.

- c. Permits for domestic wastewater treatment plants are granted subject to the policy of the Commission to encourage the development of area-wide waste collection, treatment and disposal systems. The Commission reserves the right to amend any domestic wastewater permit in accordance with applicable procedural requirements to require the system covered by this permit to be integrated into an area-wide system, should such be developed; to require the delivery of the wastes authorized to be collected in, treated by or discharged from said system, to such area-wide system; or to amend this permit in any other particular to effectuate the Commission's policy. Such amendments may be made when the changes required are advisable for water quality control purposes and are feasible on the basis of waste treatment technology, engineering, financial, and related considerations existing at the time the changes are required, exclusive of the loss of investment in or revenues from any then existing or proposed waste collection, treatment or disposal system.
- 9. Domestic wastewater treatment plants shall be operated and maintained by sewage plant operators holding a valid certificate of competency at the required level as defined in 30 TAC Chapter 30.
- 10. Facilities which generate industrial solid waste as defined in 30 TAC § 335.1 shall comply with these provisions:
 - a. Any solid waste, as defined in 30 TAC § 335.1 (including but not limited to such wastes as garbage, refuse, sludge from a waste treatment, water supply treatment plant or air pollution control facility, discarded materials, discarded materials to be recycled, whether the waste is solid, liquid, or semisolid), generated by the permittee during the management and treatment of wastewater, must be managed in accordance with all applicable provisions of 30 TAC Chapter 335, relating to Industrial Solid Waste Management.
 - b. Industrial wastewater that is being collected, accumulated, stored, or processed before discharge through any final discharge outfall, specified by this permit, is considered to be industrial solid waste until the wastewater passes through the actual point source discharge and must be managed in accordance with all applicable provisions of 30 TAC Chapter 335.
 - c. The permittee shall provide written notification, pursuant to the requirements of 30 TAC § 335.8(b)(1), to the Corrective Action Section (MC 127) of the Remediation Division informing the Commission of any closure activity involving an Industrial Solid Waste Management Unit, at least 90 days prior to conducting such an activity.
 - d. Construction of any industrial solid waste management unit requires the prior written notification of the proposed activity to the Registration and Reporting Section (MC 129) of the Registration, Review, and Reporting Division. No person shall dispose of industrial solid waste, including sludge or other solids from wastewater treatment processes, prior to fulfilling the deed recordation requirements of 30 TAC § 335.5.
 - e. The term "industrial solid waste management unit" means a landfill, surface impoundment, waste-pile, industrial furnace, incinerator, cement kiln, injection well, container, drum, salt dome waste containment cavern, or any other structure vessel, appurtenance, or other improvement on land used to manage industrial solid waste.
 - f. The permittee shall keep management records for all sludge (or other waste) removed from any wastewater treatment process. These records shall fulfill all applicable requirements of 30 TAC Chapter 335 and must include the following, as it pertains to wastewater treatment and discharge:
 - i. Volume of waste and date(s) generated from treatment process;
 - ii. Volume of waste disposed of on-site or shipped off-site;
 - iii. Date(s) of disposal;
 - iv. Identity of hauler or transporter;
 - v. Location of disposal site; and
 - vi. Method of final disposal.

The above records shall be maintained on a monthly basis. The records shall be retained at the facility site, or shall be readily available for review by authorized representatives of the TCEQ for at least five years.

11. For industrial facilities to which the requirements of 30 TAC Chapter 335 do not apply, sludge and solid wastes, including tank cleaning and contaminated solids for disposal, shall be disposed of in accordance with Chapter 361 of the Texas Health and Safety Code.

TCEQ Revision 05/2004

SLUDGE PROVISIONS

The permittee is authorized to dispose of sludge only at a Texas Commission on Environmental Quality (TCEQ) authorized land application site or co-disposal landfill. The disposal of sludge by land application on property owned, leased or under the direct control of the permittee is a violation of the permit unless the site is authorized by the TCEQ. This provision does not authorize Distribution and Marketing of sludge. This provision does not authorize land application of Class A Sludge. This provision does not authorize the permittee to land apply sludge on property owned, leased or under the direct control of the permittee.

SECTION I. REQUIREMENTS APPLYING TO ALL SEWAGE SLUDGE LAND APPLICATION

A. General Requirements

- 1. The permittee shall handle and dispose of sewage sludge in accordance with 30 TAC Chapter 312 and all other applicable state and federal regulations in a manner which protects public health and the environment from any reasonably anticipated adverse effects due to any toxic pollutants which may be present in the sludge.
- 2. In all cases, if the person (permit holder) who prepares the sewage sludge supplies the sewage sludge to another person for land application use or to the owner or lease holder of the land, the permit holder shall provide necessary information to the parties who receive the sludge to assure compliance with these regulations.
- 3. The permittee shall give 180 days prior notice to the Executive Director in care of the Wastewater Permitting Section (MC 148) of the Water Quality Division of any change planned in the sewage sludge disposal practice.

B. Testing Requirements

1. Sewage sludge shall be tested once during the term of this permit in accordance with the method specified in both 40 CFR Part 261, Appendix II and 40 CFR Part 268, Appendix I [Toxicity Characteristic Leaching Procedure (TCLP)] or other method, which receives the prior approval of the TCEQ for the contaminants listed in Table 1 of 40 CFR Section 261.24. Sewage sludge failing this test shall be managed according to RCRA standards for generators of hazardous waste, and the waste's disposition must be in accordance with all applicable requirements for hazardous waste processing, storage, or disposal. Following failure of any TCLP test, the management or disposal of sewage sludge at a facility other than an authorized hazardous waste processing, storage, or disposal facility shall be prohibited until such time as the permittee can demonstrate the sewage sludge no longer exhibits the hazardous waste toxicity characteristics (as demonstrated by the results of the TCLP tests). A written report shall be provided to both the TCEQ Registration and Reporting Section (MC 129) of the Registration, Review, and Reporting Division and the Regional Director (MC Region 11) within 7 days after failing the TCLP Test.

The report shall contain test results, certification that unauthorized waste management has stopped and a summary of alternative disposal plans that comply with RCRA standards for the management of hazardous waste. The report shall be addressed to: Director, Registration, Review, and Reporting Division (MC 129), Texas Commission on Environmental Quality, P. O. Box 13087, Austin, Texas 78711-3087. In addition, the permittee shall prepare an annual report on the results of all sludge toxicity testing. This annual report shall be submitted to the TCEQ Regional Office (MC Region 11) and the Water Quality Compliance Monitoring Team (MC 224) of the Enforcement Division by September 1 of each year.

Sewage sludge shall not be applied to the land if the concentration of the pollutants exceed the pollutant concentration criteria in Table 1. The frequency of testing for pollutants in Table 1 is found in Section I.C.

TABLE 1	
	Ceiling Concentration
Politiant	(IIIIIIIgiailis dei kiiogiaili)
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Arsenic All All All All All All All All All Al	a 1897 (1975)
Cadmium	85
Chromium	3000
Copper	4300
Lead	840
Mercury	57
Molybdenum as the state of the	THE PROPERTY OF THE PROPERTY O
Nickel	420
PCBs	49
Selenium	TOO SEE THE PROPERTY FOR THE ACTION OF THE PROPERTY FOR THE ACTION OF THE PROPERTY FOR THE
Zinc	7500
they they consend a represent basis of the property of the basis of th	Several Control of the Control of Marines Services (1997)

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All sewage sludge that is applied to agricultural land, forest, a public contact site, or a reclamation site shall be treated by one of the following methods to ensure that the sludge meets either the Class A or Class B pathogen requirements.

Six alternatives are available to demonstrate compliance with Class A sewage sludge. The first 4 options require either the density of fecal coliform in the sewage sludge be less than 1000 Most Probable Number (MPN) per gram of total solids (dry weight basis), or the density of Salmonella sp. bacteria in the sewage sludge be less than three MPN per four grams of total solids (dry weight basis) at the time the sewage sludge is used or disposed. Below are the additional requirements necessary to meet the definition of a Class A sludge.

Alternative 1 - The temperature of the sewage sludge that is used or disposed shall be maintained at or above a specific value for a period of time. See 30 TAC Section 312.82(a)(2)(A) for specific information.

Alternative 2 - The pH of the sewage sludge that is used or disposed shall be raised to above 12 std. units and shall remain above 12 std. units for 72 hours.

The temperature of the sewage sludge shall be above 52 degrees Celsius for 12 hours or longer during the period that the pH of the sewage sludge is above 12 std. units.

At the end of the 72-hour period during which the pH of the sewage sludge is above 12 std. units, the sewage sludge shall be air dried to achieve a percent solids in the sewage sludge greater than 50 percent.

Alternative 3 - The sewage sludge shall be analyzed for enteric viruses prior to pathogen treatment. The limit for enteric viruses is less than one Plaque-forming Unit per four grams of total solids (dry weight basis) either before or following pathogen treatment. See 30 TAC Section 312.82(a)(2)(C)(i-iii) for specific information. The sewage sludge shall be analyzed for viable helminth ova prior to pathogen treatment. The limit for viable helminth ova is less than one per four grams of total solids (dry weight basis) either before or following pathogen treatment. See 30 TAC Section 312.82(a)(2)(C)(iv-vi) for specific information.

Alternative 4 - The density of enteric viruses in the sewage sludge shall be less than one Plaque-forming Unit per four grams of total solids (dry weight basis) at the time the sewage sludge is used or disposed. The density of viable helminth ova in the sewage sludge shall be less than one per four grams of total solids (dry weight basis) at the time the sewage sludge is used or disposed.

Alternative 5 (PFRP) - Sewage sludge that is used or disposed of shall be treated in one of the processes to Further Reduce Pathogens (PFRP) described in 40 CFR Part 503, Appendix B. PFRP include composting, heat drying, heat treatment, and thermophilic aerobic digestion.

Alternative 6 (PFRP Equivalent) - Sewage sludge that is used or disposed of shall be treated in a process that has been approved by the U. S. Environmental Protection Agency as being equivalent to those in Alternative 5.

b. Three alternatives are available to demonstrate compliance with Class B criteria for sewage sludge.

Alternative 1 -

- i. A minimum of seven random samples of the sewage sludge shall be collected within 48 hours of the time the sewage sludge is used or disposed of during each monitoring episode for the sewage sludge.
- ii. The geometric mean of the density of fecal coliform in the samples collected shall be less than either 2,000,000 MPN per gram of total solids (dry weight basis) or 2,000,000 Colony Forming Units per gram of total solids (dry weight basis).

<u>Alternative 2</u> - Sewage sludge that is used or disposed of shall be treated in one of the Processes to Significantly Reduce Pathogens (PSRP) described in 40 CFR Part 503, Appendix B, so long as all of the following requirements are met by the generator of the sewage sludge.

- i. Prior to use or disposal, all the sewage sludge must have been generated from a single location, except as provided in paragraph v. below;
- ii. An independent Texas Licensed Professional Engineer must make a certification to the generator of a sewage sludge that the wastewater treatment facility generating the sewage sludge is designed to achieve one of the PSRP at the permitted design loading of the facility. The certification need only be repeated if the design loading of the facility is increased. The certification shall include a statement indicating the design meets all the applicable standards specified in Appendix B of 40 CFR Part 503;
- iii. Prior to any off-site transportation or on-site use or disposal of any sewage sludge generated at a wastewater treatment facility, the chief certified operator of the wastewater treatment facility or other responsible official who manages the processes to significantly reduce pathogens at the wastewater treatment facility for the permittee, shall certify that the sewage sludge underwent at least the minimum operational requirements necessary in order to meet one of the PSRP. The acceptable processes and the minimum operational and record keeping requirements shall be in accordance with established U. S. Environmental Protection Agency final guidance;
- iv. All certification records and operational records describing how the requirements of this paragraph were met shall be kept by the generator for a minimum of three years and be available for inspection by commission staff for review; and
- v. If the sewage sludge is generated from a mixture of sources, resulting from a person who prepares sewage sludge from more than one wastewater treatment facility, the resulting derived product shall meet one of the PSRP, and shall meet the certification, operation, and record keeping requirements of this paragraph.

<u>Alternative 3</u> - Sewage sludge shall be treated in an equivalent process that has been approved by the U. S. Environmental Protection Agency, so long as all of the following requirements are met by the generator of the sewage sludge.

- i. Prior to use or disposal, all the sewage sludge must have been generated from a single location, except as provided in paragraph v. below;
- ii. Prior to any off-site transportation or on-site use or disposal of any sewage sludge generated at a wastewater treatment facility, the chief certified operator of the wastewater treatment facility or other responsible official who manages the processes to significantly reduce pathogens at the wastewater treatment facility for the permittee, shall certify that the sewage sludge underwent at least the minimum operational requirements necessary in order to meet one of the PSRP. The acceptable processes and the minimum operational and record keeping requirements shall be in accordance with established U. S. Environmental Protection Agency final guidance;
- iii. All certification records and operational records describing how the requirements of this paragraph were met shall be kept by the generator for a minimum of three years and be available for inspection by commission staff for review;
- iv. The executive director will accept from the U. S. Environmental Protection Agency a finding of equivalency to the defined PSRP; and

v. If the sewage sludge is generated from a mixture of sources resulting from a person who prepares sewage sludge from more than one wastewater treatment facility, the resulting derived product shall meet one of the Processes to Significantly Reduce Pathogens, and shall meet the certification, operation, and record keeping requirements of this paragraph.

In addition, the following site restrictions must be met if Class B sludge is land applied:

- Food crops with harvested parts that touch the sewage sludge/soil mixture and are totally above the land surface shall not be harvested for 14 months after application of sewage sludge.
- ii. Food crops with harvested parts below the surface of the land shall not be harvested for 20 months after application of sewage sludge when the sewage sludge remains on the land surface for 4 months or longer prior to incorporation into the soil.
- iii. Food crops with harvested parts below the surface of the land shall not be harvested for 38 months after application of sewage sludge when the sewage sludge remains on the land surface for less than 4 months prior to incorporation into the soil.
- iv. Food crops, feed crops, and fiber crops shall not be harvested for 30 days after application of sewage sludge.
- v. Animals shall not be allowed to graze on the land for 30 days after application of sewage sludge.
 - vi. Turf grown on land where sewage sludge is applied shall not be harvested for 1 year after application of the sewage sludge when the harvested turf is placed on either land with a high potential for public exposure or a lawn.
 - vii. Public access to land with a high potential for public exposure shall be restricted for 1 year after application of sewage sludge.
 - viii. Public access to land with a low potential for public exposure shall be restricted for 30 days after application of sewage sludge.
 - ix. Land application of sludge shall be in accordance with the buffer zone requirements found in 30 TAC Section 312.44.

4. Vector Attraction Reduction Requirements

All bulk sewage sludge that is applied to agricultural land, forest, a public contact site, or a reclamation site shall be treated by one of the following alternatives 1 through 10 for Vector Attraction Reduction.

- Alternative 1 The mass of volatile solids in the sewage sludge shall be reduced by a minimum of 38 percent.
- Alternative 2 If Alternative 1 cannot be met for an anaerobically digested sludge, demonstration can be made by digesting a portion of the previously digested sludge anaerobically in the laboratory in a bench-scale unit for 40 additional days at a temperature between 30 and 37 degrees Celsius. Volatile solids must be reduced by less than 17 percent to demonstrate compliance.
- Alternative 3 If Alternative 1 cannot be met for an aerobically digested sludge, demonstration can be made by digesting a portion of the previously digested sludge with a percent solids of two percent or less aerobically in the laboratory in a bench-scale unit for 30 additional days at 20 degrees Celsius. Volatile solids must be reduced by less than 15 percent to demonstrate compliance.
- Alternative 4 The specific oxygen uptake rate (SOUR) for sewage sludge treated in an aerobic process shall be equal to or less than 1.5 milligrams of oxygen per hour per gram of total solids (dry weight basis) at a temperature of 20 degrees Celsius.
- Alternative 5 Sewage sludge shall be treated in an aerobic process for 14 days or longer. During that time, the temperature of the sewage sludge shall be higher than 40 degrees Celsius and the average temperature of the sewage sludge shall be higher than 45 degrees Celsius.

- Alternative 6 The pH of sewage sludge shall be raised to 12 or higher by alkali addition and, without the addition of more alkali shall remain at 12 or higher for two hours and then remain at a pH of 11.5 or higher for an additional 22 hours at the time the sewage sludge is prepared for sale or given away in a bag or other container.
- Alternative 7 The percent solids of sewage sludge that does not contain unstabilized solids generated in a primary wastewater treatment process shall be equal to or greater than 75 percent based on the moisture content and total solids prior to mixing with other materials. Unstabilized solids are defined as organic materials in sewage sludge that have not been treated in either an aerobic or anaerobic treatment process.
- Alternative 8 The percent solids of sewage sludge that contains unstabilized solids generated in a primary wastewater treatment process shall be equal to or greater than 90 percent based on the moisture content and total solids prior to mixing with other materials at the time the sludge is used. Unstabilized solids are defined as organic materials in sewage sludge that have not been treated in either an aerobic or anaerobic treatment process.
- Alternative 9 i. Sewage sludge shall be injected below the surface of the land.
 - ii. No significant amount of the sewage sludge shall be present on the land surface within one hour after the sewage sludge is injected.
 - iii. When sewage sludge that is injected below the surface of the land is Class A with respect to pathogens, the sewage sludge shall be injected below the land surface within eight hours after being discharged from the pathogen treatment process.
- Alternative 10i. Sewage sludge applied to the land surface or placed on a surface disposal site shall be incorporated into the soil within six hours after application to or placement on the land.
 - ii. When sewage sludge that is incorporated into the soil is Class A with respect to pathogens, the sewage sludge shall be applied to or placed on the land within eight hours after being discharged from the pathogen treatment process.

C. Monitoring Requirements

Toxicity Characteristic Leaching Procedure (TCLP) Test

- once during the term of this permit

PCBs

- once during the term of this permit

All metal constituents and Fecal coliform or <u>Salmonella</u> sp. bacteria shall be monitored at the appropriate frequency shown below, pursuant to 30 TAC Section 312.46(a)(1):

	nt of sewage sludge (*) tons per 365-day period	Monitoring Frequency
. 0	to less than 290	Once/Year
290	to less than 1,500	Once/Quarter
1,500	to less than 15,000	Once/Two Months
15,000	or greater	Once/Month

(*) The amount of bulk sewage sludge applied to the land (dry weight basis).

Representative samples of sewage sludge shall be collected and analyzed in accordance with the methods referenced in 30 TAC Section 312.7.

SECTION II. REQUIREMENTS SPECIFIC TO BULK SEWAGE SLUDGE FOR APPLICATION TO THE LAND MEETING CLASS A or B PATHOGEN REDUCTION AND THE CUMULATIVE LOADING RATES IN TABLE 2, OR CLASS B PATHOGEN REDUCTION AND THE POLLUTANT CONCENTRATIONS IN TABLE 3

For those permittees meeting Class A or B pathogen reduction requirements and that meet the cumulative loading rates in Table 2 below, or the Class B pathogen reduction requirements and contain concentrations of pollutants below listed in Table 3, the following conditions apply:

A. Pollutant Limits

Employed Committee and

Table 2

	and the second section of the s	7. 15. 41.42	Cumulative	e Pollutant	Loading l	Rate	5) 3)
<u>Pollutant</u>	and the second		· • • • • • • • • • • • • • • • • • • •	pounds per	acre)		*1
Arsenic				36			
Cadmium				35			1
Chromium	La Salar La	455.4	a parabolica (April	2677	S 48 1 2 2 2		
Copper				1339			
Lead	Constructor of the service	A 1 4 4 5 5 5 5 5		268			1
Mercury				. 15			
Molybdenum			Кер	ort Only			
Nickel	Hitarian Lagran	de de	adata orași est al a	375	and the second		
Selenium	ergal orange and	100	A State and the	89	30000		
Zinc	•			89 2500	tan da ara		

Table 3

	Monthly Average Concentration
Pollutant	(milligrams per kilogram)*
Arsenic	$g_{12}, \dots, g_{N_{1}}, g_{N_{1}}, g_{N_{2}}, \dots, g_{N_{N_{1}}} \in oldsymbol{4.4}$, $g_{1}, \dots, g_{N_{N_{1}}}, g_{N_{1}}, g_{N_{1}}$
Cadmium	39
Chromium	39 1200
Copper	1500
Lead	300
Mercury	17
Molybdenum	Report Only
Nickel Andrews Andrews Andrews	gagagagaga y 420 aya a ay
Selenium	36
Zinc - And Analysis of the Market	2800

Dry weight basis

B. Pathogen Control

All bulk sewage sludge that is applied to agricultural land, forest, a public contact site, a reclamation site, shall be treated by either Class A or Class B pathogen reduction requirements as defined above in Section I.B.3.

C. Management Practices

- 1. Bulk sewage sludge shall not be applied to agricultural land, forest, a public contact site, or a reclamation site that is flooded, frozen, or snow-covered so that the bulk sewage sludge enters a wetland or other waters in the State.
- 2. Bulk sewage sludge not meeting Class A requirements shall be land applied in a manner which complies with the Management Requirements in accordance with 30 TAC Section 312.44.
- 3. Bulk sewage sludge shall be applied at or below the agronomic rate of the cover crop.

- 4. An information sheet shall be provided to the person who receives bulk sewage sludge sold or given away. The information sheet shall contain the following information:
 - a. The name and address of the person who prepared the sewage sludge that is sold or given away in a bag or other container for application to the land.
 - b. A statement that application of the sewage sludge to the land is prohibited except in accordance with the instruction on the label or information sheet.
 - c. The annual whole sludge application rate for the sewage sludge application rate for the sewage sludge that does not cause any of the cumulative pollutant loading rates in Table 2 above to be exceeded, unless the pollutant concentrations in Table 3 found in Section II above are met.

D. Notification Requirements

- 1. If bulk sewage sludge is applied to land in a State other than Texas, written notice shall be provided prior to the initial land application to the permitting authority for the State in which the bulk sewage sludge is proposed to be applied. The notice shall include:
 - a. The location, by street address, and specific latitude and longitude, of each land application site.
 - b. The approximate time period bulk sewage sludge will be applied to the site.
 - c. The name, address, telephone number, and National Pollutant Discharge Elimination System permit number (if appropriate) for the person who will apply the bulk sewage sludge.
- 2. The permittee shall give 180 days prior notice to the Executive Director in care of the Wastewater Permitting Section (MC 148) of the Water Quality Division of any change planned in the sewage sludge disposal practice.

E. Record keeping Requirements

The sludge documents will be retained at the facility site and/or shall be readily available for review by a TCEQ representative. The person who prepares bulk sewage sludge or a sewage sludge material shall develop the following information and shall retain the information at the facility site and/or shall be readily available for review by a TCEQ representative for a period of <u>five years</u>. If the permittee supplies the sludge to another person who land applies the sludge, the permittee shall notify the land applier of the requirements for record keeping found in 30 TAC Section 312.47 for persons who land apply.

- 1. The concentration (mg/kg) in the sludge of each pollutant listed in Table 3 above and the applicable pollutant concentration criteria (mg/kg), or the applicable cumulative pollutant loading rate and the applicable cumulative pollutant loading rate limit (lbs/ac) listed in Table 2 above.
- 2. A description of how the pathogen reduction requirements are met (including site restrictions for Class B sludges, if applicable).
- 3. A description of how the vector attraction reduction requirements are met.
- 4. A description of how the management practices listed above in Section II.C are being met.
- 5. The following certification statement:

"I certify, under penalty of law, that the applicable pathogen requirements in 30 TAC Section 312.82(a) or (b) and the vector attraction reduction requirements in 30 TAC Section 312.83(b) have been met for each site on which bulk sewage sludge is applied. This determination has been made under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the management practices have been met. I am aware that there are significant penalties for false certification including fine and imprisonment."

6. The recommended agronomic loading rate from the references listed in Section II.C.3. above, as well as the actual agronomic loading rate shall be retained.

The person who applies bulk sewage sludge or a sewage sludge material shall develop the following information and shall retain the information at the facility site and/or shall be readily available for review by a TCEQ representative indefinitely. If the permittee supplies the sludge to another person who land applies the sludge, the permittee shall notify the land applier of the requirements for record keeping found in 30 TAC Section 312.47 for persons who land apply.

- 1. A certification statement that all applicable requirements (specifically listed) have been met, and that the permittee understands that there are significant penalties for false certification including fine and imprisonment. See 30 TAC Section 312.47(a)(4)(A)(ii) or 30 TAC Section 312.47(a)(5)(A)(ii), as applicable, and to the permittee's specific sludge treatment activities.
- 2. The location, by street address, and specific latitude and longitude, of each site on which sludge is applied.
- 3. The number of acres in each site on which bulk sludge is applied.
- 4. The date and time sludge is applied to each site.
- 5. The cumulative amount of each pollutant in pounds/acre listed in Table 2 applied to each site.
- 6. The total amount of sludge applied to each site in dry tons.

The above records shall be maintained on-site on a monthly basis and shall be made available to the Texas Commission on Environmental Quality upon request.

F. Reporting Requirements

The permittee shall report annually to the TCEQ Regional Office (MC Region 11) and Water Quality Compliance Monitoring Team (MC 224) of the Enforcement Division, by September 1 of each year the following information:

- 1. Results of tests performed for pollutants found in either Table 2 or 3 as appropriate for the permittee's land application practices.
- 2. The frequency of monitoring listed in Section I.C. which applies to the permittee.
- 3. Toxicity Characteristic Leaching Procedure (TCLP) results.
- 4. Identity of hauler(s) and TCEQ transporter number.
- 5. PCB concentration in sludge in mg/kg. In the state of tables of the state of the
- 6. Date(s) of disposal.
- 7. Owner of disposal site(s).
- 8. Texas Commission on Environmental Quality registration number, if applicable.
- 9. Amount of sludge disposal dry weight (lbs/acre) at each disposal site.
- 10. The concentration (mg/kg) in the sludge of each pollutant listed in Table 1 (defined as a monthly average) as well as the applicable pollutant concentration criteria (mg/kg) listed in Table 3 above, or the applicable pollutant loading rate limit (lbs/acre) listed in Table 2 above if it exceeds 90% of the limit.
- 11. Level of pathogen reduction achieved (Class \underline{A} or Class \underline{B}).
- 12. Alternative used as listed in Section I.B.3.(a. or b.). Alternatives describe how the pathogen reduction requirements are met. If Class B sludge, include information on how site restrictions were met.
- 13. Vector attraction reduction alternative used as listed in Section I.B.4.
- 14. Annual sludge production in dry tons/year.

- 15. Amount of sludge land applied in dry tons/year.
- 16. The certification statement listed in either 30 TAC Section 312.47(a)(4)(A)(ii) or 30 TAC Section 312.47(a)(5)(A)(ii) as applicable to the permittee's sludge treatment activities, shall be attached to the annual reporting form.
- 17. When the amount of any pollutant applied to the land exceeds 90% of the cumulative pollutant loading rate for that pollutant, as described in Table 2, the permittee shall report the following information as an attachment to the annual reporting form.
 - a. The location, by street address, and specific latitude and longitude.
 - b. The number of acres in each site on which bulk sewage sludge is applied.
 - c. The date and time bulk sewage sludge is applied to each site.
 - d. The cumulative amount of each pollutant (i.e., pounds/acre) listed in Table 2 in the bulk sewage sludge applied to each site.
 - e. The amount of sewage sludge (i.e., dry tons) applied to each site.

The above records shall be maintained on a monthly basis and shall be made available to the Texas Commission on Environmental Quality upon request.

SECTION III. REQUIREMENTS APPLYING TO ALL SEWAGE SLUDGE DISPOSED IN A MUNICIPAL SOLID WASTE LANDFILL

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- A. The permittee shall handle and dispose of sewage sludge in accordance with 30 TAC Chapter 330 and all other applicable state and federal regulations to protect public health and the environment from any reasonably anticipated adverse effects due to any toxic pollutants that may be present. The permittee shall ensure that the sewage sludge meets the requirements in 30 TAC Chapter 330 concerning the quality of the sludge disposed in a municipal solid waste landfill.
- B. If the permittee generates sewage sludge and supplies that sewage sludge to the owner or operator of a Municipal Solid Waste Landfill (MSWLF) for disposal, the permittee shall provide to the owner or operator of the MSWLF appropriate information needed to be in compliance with the provisions of this permit.
- C. The permittee shall give 180 days prior notice to the Executive Director in care of the Wastewater Permitting Section (MC 148) of the Water Quality Division of any change planned in the sewage sludge disposal practice.
- D. Sewage sludge shall be tested once during the term of this permit in accordance with the method specified in both 40 CFR Part 261, Appendix II and 40 CFR Part 268, Appendix I (Toxicity Characteristic Leaching Procedure) or other method, which receives the prior approval of the TCEQ for contaminants listed in Table 1 of 40 CFR Section 261.24. Sewage sludge failing this test shall be managed according to RCRA standards for generators of hazardous waste, and the waste's disposition must be in accordance with all applicable requirements for hazardous waste processing, storage, or disposal.

Following failure of any TCLP test, the management or disposal of sewage sludge at a facility other than an authorized hazardous waste processing, storage, or disposal facility shall be prohibited until such time as the permittee can demonstrate the sewage sludge no longer exhibits the hazardous waste toxicity characteristics (as demonstrated by the results of the TCLP tests). A written report shall be provided to both the TCEQ Registration and Reporting Section (MC 129) of the Registration, Review, and Reporting Division and the Regional Director (MC Region 11) of the appropriate TCEQ field office within 7 days after failing the TCLP Test.

The report shall contain test results, certification that unauthorized waste management has stopped and a summary of alternative disposal plans that comply with RCRA standards for the management of hazardous waste. The report shall be addressed to: Director, Registration, Review, and Reporting Division (MC 129), Texas Commission on Environmental Quality, P. O. Box 13087, Austin, Texas 78711-3087. In addition, the permittee shall prepare an annual report on the results of all sludge toxicity testing. This annual report shall be submitted to the TCEQ Regional Office (MC Region 11) and the Water Quality Compliance Monitoring Team (MC 224) of the Enforcement Division by September 1 of each year.

- E. Sewage sludge shall be tested as needed, in accordance with the requirements of 30 TAC Chapter 330.
- F. Record keeping Requirements

The permittee shall develop the following information and shall retain the information for five years.

- 1. The description (including procedures followed and the results) of all liquid Paint Filter Tests performed.
- 2. The description (including procedures followed and results) of all TCLP tests performed.

The above records shall be maintained on-site on a monthly basis and shall be made available to the Texas Commission on Environmental Quality upon request.

G. Reporting Requirements

The permittee shall report annually to the TCEQ Regional Office (MC Region 11) and Water Quality Compliance Monitoring Team (MC 224) of the Enforcement Division by September 1 of each year the following information:

- 1. Toxicity Characteristic Leaching Procedure (TCLP) results.
- 2. Annual sludge production in dry tons/year.
- 3. Amount of sludge disposed in a municipal solid waste landfill in dry tons/year.
- 4. Amount of sludge transported interstate in dry tons/year.
- 5. A certification that the sewage sludge meets the requirements of 30 TAC Chapter 330 concerning the quality of the sludge disposed in a municipal solid waste landfill.
- 6. Identity of hauler(s) and transporter registration number.
- 7. Owner of disposal site(s).
- 8. Location of disposal site(s).
- 9. Date(s) of disposal.

The above records shall be maintained on-site on a monthly basis and shall be made available to the Texas Commission on Environmental Quality upon request.

SPECIAL PROVISIONS:

- 1. This permit is granted subject to the policy of the Commission to encourage the development of areawide waste collection, treatment and disposal systems. The Commission reserves the right to amend this permit in accordance with applicable procedural requirements to require the system covered by this permit to be integrated into an areawide system, should such be developed; to require the delivery of the wastes authorized to be collected in, treated by or discharged from said system, to such areawide system; or to amend this permit in any other particular to effectuate the Commission's policy. Such amendments may be made when the changes required are advisable for water quality control purposes and are feasible on the basis of waste treatment technology, engineering, financial, and related considerations existing at the time the changes are required, exclusive of the loss of investment in or revenues from any then existing or proposed waste collection, treatment or disposal system.
- 2. The permittee shall employ or contract with one or more licensed wastewater treatment facility operators or wastewater system operations companies holding a valid license or registration according to the requirements of 30 TAC Chapter 30, Occupational Licenses and Registrations and in particular 30 TAC Chapter 30, Subchapter J, Wastewater Operators and Operations Companies.
 - This Category C facility must be operated by a chief operator or an operator holding a Category C license or higher. The facility must be operated a minimum of five days per week by the licensed chief operator or an operator holding the required level of license or higher. The licensed chief operator or operator holding the required level of license or higher must be available by telephone or pager seven days per week. Where shift operation of the wastewater treatment facility is necessary, each shift which does not have the on-site supervision of the licensed chief operator must be supervised by an operator in charge who is licensed not less than one level below the category for the facility.
- 3. The permittee shall maintain and operate the treatment facility in order to achieve optimum efficiency of treatment capability. This shall include required monitoring of effluent flow and quality as well as appropriate grounds and building maintenance.
- 4. Prior to construction of the Interim I, Interim II and Final phase treatment facilities, the permittee shall submit to the TCEQ Wastewater Permitting Section (MC 148) a summary submittal letter in accordance with the requirements in 30 TAC Section 317.1. If requested by the Wastewater Permitting Section, the permittee shall submit plans, specifications and a final engineering design report which comply with 30 TAC Chapter 317, Design Criteria for Sewerage Systems. The permittee shall clearly show how the treatment system will meet the permitted effluent limitations required on Page 2 of the permit.
- 5. The permittee shall comply with the requirements of 30 TAC Section 309.13 (a) through (d). In addition, by ownership of the required buffer zone area, the permittee shall comply with the requirements of 30 TAC Section 309.13(e).
- 6. Reporting requirements according to 30 TAC Sections 319.1-319.11 and any additional effluent reporting requirements contained in this permit are suspended from the effective date of the permit until plant startup or discharge, whichever occurs first, from the facility described by this permit. The permittee shall provide written notice to the TCEQ Regional Office (MC Region 1) and the Applications Review and Processing Team (MC 148) of the Water Quality Division at least forty-five (45) days prior to plant startup or anticipated discharge, whichever occurs first and prior to completion of each additional phase.

- 7. Application rates to the irrigated land shall not exceed 1.12 acre-feet per year per acre irrigated in the Interim I Phase, 2.24 acre-feet per year per acre irrigated in the Interim II Phase, and 4.48 acre-feet per year per acre irrigated in the Final Phase. The permittee is responsible for providing equipment to determine application rates and maintaining accurate records of the volume of effluent applied. These records shall be made available for review by the Texas Commission on Environmental Quality and shall be maintained for at least three years.
- 8. Irrigation practices shall be designed and managed so as to prevent ponding of effluent or contamination of ground and surface waters and to prevent the occurrence of nuisance conditions in the area. Cover crops shall be established and well maintained in the irrigation area throughout the year for wastewater and nutrient uptake by the crop and to prevent pathways for wastewater surfacing. Tailwater control facilities shall be provided as necessary to prevent the discharge of any wastewater from the irrigated land.
- 9. Wastewater shall not be applied for irrigation during rainfall events or when the ground is frozen or saturated.
- 10. The permittee shall erect adequate signs stating that the irrigation water is from a non-potable water supply for any area where treated effluent is stored or where there exist hose bibs or faucets. Signs shall consist of a red slash superimposed over the international symbol for drinking water accompanied by the message "DO NOT DRINK THE WATER" in both English and Spanish. All piping transporting the effluent shall be clearly marked with these same signs.
- 11. Spray fixtures for the irrigation system shall be of such design that they cannot be operated by unauthorized personnel.
- 12. Irrigation with effluent shall be accomplished only when the area specified is not in use.
- 13. The permittee shall maintain a long term contract with the owner(s) of the land application site which is authorized for use in this permit, or own the land authorized for land application of treated effluent.
- 14. Prior to commencing land application of treated effluent, the permittee shall obtain representative soil samples from the root zones of the land application area. Composite sampling techniques shall be used. Each composite sample shall represent no more than 20 acres with no less than 15 subsamples representing each composite sample. Subsamples shall be composited by like sampling depth and soil type for analysis and reporting. Soil types are soils that have like topsoil or plow layer textures. These soils shall be sampled individually from 0 to 6 inches, 6 to 18 inches, and 18 to 30 inches below ground level. The permittee shall sample and analyze soils in December to March of each year. Samples shall be taken within the same 45 day time-frame each year.

The permittee shall provide annual soil analyses of the land application area for pH [2:1 (v/v) water/soil mixture], conductivity [2:1 (v/v) water/soil mixture]; Total Kjeldahl Nitrogen (TKN), nitrate-nitrogen, and plant-available potassium; calcium; magnesium; sulfur; and phosphorus. The plant nutrient parameters shall be analyzed on a plant available or extractable basis. Phosphorus shall be analyzed according to the Mehlich III procedure and potassium, calcium, magnesium, sodium, and sulfur may also be analyzed in the Mehlich III extract. Plant-available phosphorus, potassium, calcium, magnesium, sodium and sulfur shall be reported on a dry weight basis in mg/kg; conductivity, in mmho/cm; and pH, in standard units. Kjeldahl procedures that use methods that rely on mercury as a catalyst are not acceptable.

The permittee shall submit the results of the annual soil sample analyses with copies of the laboratory reports to the TCEQ Region 11 Office (MC R-11), and the Water Quality Compliance Monitoring Team (MC-224) of the Enforcement Division, no later than the end of September of each sampling year. If wastewater is not applied in a particular year, the permittee shall notify the same TCEQ offices and indicate that wastewater has not been applied on the approved land disposal site during that year.

- 15. Holding ponds shall conform to the Texas Commission on Environmental Quality "Design Criteria for Sewerage Systems" requirements for stabilization ponds with regard to construction and levee design, and a minimum of 2 feet of freeboard shall be maintained.
- 16. Permanent transmission lines shall be installed from the holding pond to each tract of land to be irrigated utilizing effluent from that pond.

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- 17. Facilities for the retention of treated or untreated wastewater shall be adequately lined to control seepage. The following methods of pond lining are acceptable.
 - a. In-situ clay soils or placed and compacted clay soils meeting the following requirements:
 - 1) More than 30% passing a No. 200 mesh sieve where the manufacture of the sieve of
 - 2) Liquid limit greater than 30%
 - 3) Plasticity index greater than 15 we compare the last and those separate progress from the approximation
 - 4) A minimum thickness of 3 feet
 - 5) Permeability equal to or less than 1x10⁻⁷ cm/sec (*)
 - 6) Soil compaction will be 95% standard proctor at optimum moisture content (*)
 - (*) For new and/or modified ponds only.
 - b. Membrane lining with a minimum thickness of 30 mils, and an underdrain leak detection system.
 - c. An alternate method of pond lining may be utilized with prior approval from the Executive Director.

The permittee shall furnish certification by a Texas Licensed Professional Engineer that the completed pond lining meets the appropriate criteria above prior to utilization of the facilities. The certification shall be sent to the TCEQ Regional Office (MC Region 11), Water Quality Assessment Team (MC-150) of the Water Quality Division and Water Quality Compliance Monitoring Team (MC 224) of the Enforcement Division.

- 18. The permittee shall maintain a minimum 50-foot buffer on either side of all creeks, streams, or tributaries of Kentucky Branch Creek where no effluent will be applied.
- 19. The permittee identified one water well located within the irrigation application area. The water well shall be properly plugged by the permittee in accordance with the 16 TAC Chapter §76.1004 prior to the commencement of wastewater irrigation. A copy of the Well Plugging Report (TDLR Form a004WWD) shall be submitted by the permittee to the TCEQ Regional Office (MC Region 11) and the Water Quality Assessment Team (MC-150) of the TCEQ Water Quality Division within 30 days of plugging completion.
- 20. The permittee shall maintain a minimum 500-foot buffer zone from the effluent irrigation site to all springs as provided by 30 TAC §309.13(C)(3).
- 21. Irrigation shall not be effected on areas that have slopes greater than 12 percent.

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- 22. The permittee shall submit a crop management plan based on current soil analysis results to the TCEQ Water Quality Assessment Team (MC-150) of the Water Quality Division and the TCEQ Regional Office (MC Region 11) for review and approval within 90 days of permit issuance. Irrigation with wastewater shall not be effected until the subject crop management plan is approved.
- 23. The permittee shall provide facilities for the protection of its wastewater treatment facilities from a 100-year flood.

ATTACHMENT B



TCEQ PROPOSED TCEQ PERMIT NO. WQ0014615001

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APPLICATION BY	§	BEFORE THE
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EXECUTIVE DIRECTOR'S RESPONSE TO PUBLIC COMMENT

The Executive Director (ED) of the Texas Commission on Environmental Quality (the commission or TCEQ) files this Response to Public Comment (Response) on the Rancho Del Lago, Inc.'s (Applicant) application and ED's preliminary decision. As required by 30 Texas Administrative Code (TAC) Section (§) 55.156, before a permit is issued, the ED prepares a response to all timely, relevant and material, or significant comments. The Office of Chief Clerk timely received comment letter from the following person: Ms. Sarah M. Baker with Save Our Springs Alliance, on behalf of Ms. Shirley Beck and Mr. Ron Harris. Ms. Baker also included an engineer's (Mr. Venhuizen) assessment of the site in a letter dated March 2, 2006. This response addresses all such timely public comments received, whether or not withdrawn.

If you need more information about this permit application or the wastewater permitting process, please call the TCEQ Office of Public Assistance at 1-800-687-4040. General information about the TCEQ can be found at our website at www.tceq.state.tx.us.

BACKGROUND

Description of Facility

The Applicant has applied to the TCEQ for a new permit that would authorize the discharge of treated domestic wastewater at a daily average flow not to exceed 100,000 gallons per day (gpd) in the interim I phase, 200,000 gpd in the interim two phase, and 400,000 gpd via surface irrigation of 100 acres of public access landscape and a golf course. The wastewater treatment facility will serve a residential subdivision.

The Rockin' J Ranch Subdivision wastewater treatment facility will consist of an activated sludge process plant using the complete mix mode in all phases. The interim I phase will include a bar screen, aeration basin, final clarifier, and chlorine contact chamber. The interim II phase will include an additional aeration basin, and the final phase will include two more additional aeration basins (for a total of four aeration basins) and an additional final clarifier as well. The facility will also include one storage pond with a total surface area of 13.5 acres and a total capacity of 137.2 acre-feet for storage of treated effluent prior to irrigation. The facility has not yet been constructed.

This permit will not authorize a discharge of pollutants into water in the state. The wastewater treatment facilities will be located approximately 3.9 miles southeast of the intersection of State Highway 281 and Farm-to-Market Road 32 in Blanco County, Texas. The disposal site will be located approximately 3.2 miles southeast of the intersection State Highway 281 and Farm-to-Market Road 32 in Blanco County, Texas. The facility and disposal site are located in the drainage basin of Upper Blanco River in Segment No. 1813 of the Guadalupe River Basin.

Procedural Background

The permit application for a new permit was received on April 18, 2005 and declared administratively complete on June 27, 2005. The Notice of Receipt and Intent to Obtain a Water Quality Permit (NORI) was published on July 27, 2005 in the *Blanco County News*. The Notice of Application and Preliminary Decision (NAPD) for a Water Quality Permit was published on February 1, 2006 in the *Blanco County News*. The public comment period ended on March 3, 2006. This application was administratively complete on or after September 1, 1999; therefore, this application is subject to the procedural requirements adopted pursuant to House Bill 801, 76th Legislature, 1999.

COMMENTS AND RESPONSES

COMMENT 1:

Ms. Baker states that the Applicant's adjacent landowner map conflicts with the recently filed plats with Blanco County, showing a different configuration of the proposed golf course abutting Ms. Beck's property on the eastern edge of Applicant's property line. Additionally, Ms. Baker is concerned that the recent plats include added lots and Living Unit Equivalents (LUEs) to the subdivision. Ms. Baker is concerned that the draft permit limitations will not accommodate the LUEs and could result in plant failure.

RESPONSE 1:

The application states that the subdivision is a master planned community and at completion will contain 1250 total lots. With an expected household wastewater generation rate of 300,000 gpd, the wastewater to be generated at buildout will be 375,000 gpd, which was rounded to 400,000 gpd for the proposed final phase. The expected wastewater generated from the proposed subdivision at full build-out is not permitted to exceed the proposed final phase flow. If additional LUEs are subsequently added which cause the actual flow to exceed the permitted daily average flow, the Applicant must seek a major amendment for the increase in flow and upgrade the wastewater treatment facility for expansion to accommodate the additional flow. If the Applicant seeks to increase capacity and applies for a major amendment, the public will be notified and given an opportunity for review and comment.

COMMENT 2:

Ms. Baker states that there is confusion about the exact location for the proposed irrigation fields, treatment plant site, and holding ponds due to the Applicant's varied proposals in different jurisdictions. Ms. Baker questions whether the variations in locations for the irrigation fields warrant

¹³⁰ TAC §305.126 (a)

new soil analyses, slope information, and vegetative analyses.

RESPONSE 2:

If the proposed irrigation fields, treatment plant, and holding ponds are in fact installed in a different location other than what was shown in the permit application, the Applicant may be subject to enforcement action by obtaining the permit through misrepresentation or failure to disclose fully all relevant facts.²

COMMENT 3:

Ms. Baker believes that the spring on Ms. Beck's property may be within 500 feet of the Applicant's proposed irrigation fields. Irrespective of whether hydrological conductivity exists between the fields and the spring, Ms. Baker is concerned that the increased nutrients could run off the irrigation fields and pollute the spring on Ms. Beck's property.

RESPONSE 3:

The draft permit, in Special Provision 20, requires that the Applicant maintain a minimum 500-foot buffer zone from the proposed effluent irrigation site to all springs as provided for in 30 TAC §309.13(c)(3). This requirement shall be a design criterion in the final engineering design of the proposed effluent irrigation system. The commission is prohibited from issuing, amending, or renewing a permit if a facility does not meet the buffer zone requirements of §309.13.

The permit prohibits discharges to water in the state, including both ground and surface water, and contains safeguards to minimize risks to nearby water sources. For one, land application may not take place during rainfall events or when the ground is frozen or saturated according to Special Provision No. 9, which minimizes the risk of effluent leaving the application area. Further, Special Provision No. 8 requires that irrigation practices be managed to prevent ponding of effluent or contamination of ground and surface waters. Cover crops in the irrigation area will also be managed to ensure nutrient uptake and prevent pathways for wastewater surfacing. Discharges to ground or surface water constitute a permit violation and are subject to TCEQ enforcement action.

COMMENT 4:

Ms. Baker is concerned that potential runoff or leaching from the Applicant's proposed irrigation activities may potentially harm wildlife on Ms. Beck's property which is maintained as a wildlife preserve, in particular a unique endangered salamander and a Golden-cheeked warbler.

RESPONSE 4:

The draft permit does not authorize the discharge of pollutants into water in the state. Conditions have been added to the draft permit to prevent the potential migration of treated effluent off the Applicant's irrigation land. Such conditions include a prohibition against irrigating on areas with a slope greater than twelve percent. In addition, the proposed application rates in the draft permit are below the hydraulic application rate calculated at the time a water balance was performed, to ensure

² 30 TAC 305.44(b) requires that all application signatories attest to the veracity of the application information and acknowledge that there are significant penalties for submittal of false information, including the possibility of fine and imprisonment for knowing violations.

proper uptake of treated effluent by the cover crop. As long as the Applicant operates within the permit conditions, offsite migration of treated effluent is not expected, as well as potential effects on adjacent properties.

The Applicant must additionally comply with all applicable state and federal regulations, including regulations concerning threatened or endangered species. The U.S. Fish and Wildlife Service or the Texas Parks and Wildlife Department have jurisdiction over and can provide assistance regarding the presence of threatened or endangered species or habitat. The U.S. Fish and Wildlife Service may be contacted by mail at 10711 Burnet Road, Suite 200, Austin, Texas 78758-4460 or by telephone at 512-490-0057. The Texas Parks and Wildlife Department may be contacted by mail at 4200 Smith School Road, Austin, Texas 78744 or by telephone at 1-800-792-1112. These agencies are included in the mailing list for this application.

COMMENT 5:

Ms. Baker states that according to the application, the treatment plant and holding pond abut Ms. Beck and Mr. Harris' properties. Ms. Baker is concerned that the proximity of the plant and pond to Ms. Beck and Mr. Harris' properties will subject them to nuisance odors, light and noise from the facility, and generally will limit their ability to enjoy the property.

RESPONSE 5:

The draft permit contains buffer zone requirements, as required by 30 TAC §309.13, and are designed to abate and control a nuisance of odor. The Applicant, as stated in the application, can meet the buffer zone requirements by owning and maintaining a 150-foot buffer zone between the treatment units to the nearest property line.

The TCEO is not authorized to address the issues of noise pollution or visual effects that may be caused by the Applicant's activities. The permit limitations prohibit the creation of a nuisance odor condition that would interfere with the landowner's use and enjoyment of his property. If the Applicant's activities create a nuisance condition, the TCEQ may be contacted to investigate whether a permit violation has occurred. Potential permit violations may be reported to TCEO Region 11 Office in Austin at (512)339-2929, or by calling the state-wide toll-free number at 1-888-777-3186. website: complaints also filed online at the following Citizen may. http://www.tceq.state.tx.us/enforcement/complaints/index.html.

COMMENT 6:

Ms. Baker is concerned that the practice of irrigating wastewater on a golf course may exponentially increase the pollution risks when the soils are over-watered. Ms. Baker is concerned that the irrigated wastewater will combine with landscaping fertilizers and pesticides on the golf course and risk polluting surface and groundwater. Ms. Baker suggests that the draft permit incorporate special provisions limiting or prohibiting additional nutrients being applied to the irrigation fields.

RESPONSE 6:

The draft permit addresses and places limitations on surface irrigation for the designated acreage. Neither commingling of effluent with landscaping chemicals or migration to surface or groundwater is expected or permitted according to the draft permit limitations. To prevent runoff, treated effluent

shall not be applied for irrigation when the ground is saturated or frozen, according to Special Provision No.9. Any discharges to ground or surface water constitute a permit violation and are subject to TCEQ enforcement action.

COMMENT 7:

Ms. Baker states that the calculations of wastewater irrigation evaporation and nutrient loadings appear to assume uniform application when in reality distribution is uneven, as is uptake of water and nutrients. The permit application fails to consider the possibility of uneven uptake due to design limitations of spray irrigation, clogging, slope, sunlight, depth and makeup of soil, temperature as well as other factors.

RESPONSE 7:

The proposed application rate shall not exceed 4.48 acre-feet per year per acre of effluent irrigated in the final phase. The application rate is set below the actual water consumptive needs and nitrogen requirements of the cover crop. The irrigation area consists predominantly of grass and is expected to have relatively uniform uptake. Operating within the permit conditions, the irrigation of treated effluent is not expected to result in ponding or runoff due to the consumptive rate of the cover crop. The spray irrigation system must also be designed to provide a uniform water distribution.³ Due to the requirements for the spray irrigation system, consumptive rate of the cover crop, and application rate, the uptake of treated effluent is expected to be relatively uniform and not result in ponding or runoff of effluent.

COMMENT 8:

Ms. Baker is concerned that improper use of maintenance machinery onsite could lead to broken sprinkler heads and irrigation lines, causing oversaturation of soils and untreated runoff. Ms. Baker recommends that the draft permit incorporate restrictions on the weight and type of maintenance machinery and that golf course and sewer plant personnel be trained so as to avoid damaging the irrigation system.

RESPONSE 8:

Maintenance of the irrigation fields as well as personnel training will be incorporated in a crop management plan, which the Applicant must submit no later than 90 days after permit issuance. Special Provision No. 22 of the draft permit will take into consideration best management practices for irrigation. Upon issuance of the draft permit and approval of the crop management plan by the TCEQ, the maintenance and management practices of the irrigation fields will constitute an enforceable term of the permit.

COMMENT 9:

Ms. Baker states that the proposed irrigation system does not provide adequate monitoring for soil saturation, runoff, and leaching of contaminants into the soil. Ms. Baker asks that lysimeters are added to the irrigation zone and monitored frequently. Ms. Baker further states that the lysimeters should be monitored according to the ratio of wastewater volume entering the treatment plant and area being irrigated at that time. Ms. Baker further states that soil moisture content monitors should

³ 30 TAC §309.20(b)(5)(B)(i)

also be added to the irrigation zone and tied into the plant monitoring system to automatically prevent irrigation when the soil is saturated.

RESPONSE 9:

The TCEQ regulations do not require that applicants for a water quality permit utilize lysimeters for soil moisture monitoring. Soil monitoring provisions are included in the draft permit, Special Condition No. 14 for soil samples from root zones of irrigation area, to be taken from December to March and for results to be submitted annually to the TCEQ. The soil analyses measure a variety of parameters to ensure that treated effluent is being taken up and utilized by the crop cover. Provisions also exist in the draft permit to prevent pooling of treated effluent or runoff. The Applicant is additionally required to submit a separate engineering report with water balance and storage volume calculations, method of application, irrigation, efficiency, and nitrogen balance.

The Applicant has proposed to develop the golf course according to U.S. Golf Association (USGA) building criteria, which contain separate criteria for soil moisture monitoring and analysis of plant health.

COMMENT 10:

Ms. Baker states that the draft permit does not indicate whether there are automatic controls or alarms for high water levels in the effluent storage tank or pump disablement. Ms. Baker states that the draft permit should be modified to incorporate alarms and automatic notification for these conditions.

RESPONSE 10:

The draft permit has provisions for storage of effluent, in particular for a storage pond with a clay lining and a capacity of 137.2 acre-feet. The storage pond is required to have a membrane lining with a minimum thickness of 30 mils, including an underdrain leak detection system. The storage pond must also be certified by a professional engineer prior to utilization.

Specifications for high and low water level alarms, along with other system instrumentation, are considered in the detailed engineering design stage. The Applicant indicates, though, that the irrigation system will be designed to disable the pumps should a low-pressure condition occur. Further, the Applicant states that high water alarms and pump disablement features will be incorporated throughout the treatment facility units.

COMMENT 11:

Ms. Baker states that according to the draft permit, the Applicant must contract for sludge disposal at another location not owned by the Applicant. Truck transportation of sludge from the facility to the disposal location will negatively impact neighboring landowners and risks their health and safety. Increased truck traffic during construction of the facility will negatively impact Ms. Beck, Mr. Harris, and other neighboring landowners.

RESPONSE 11:

The TCEQ does not have jurisdiction over traffic issues in the wastewater permitting process. If problems occur on county roads, the county is responsible for taking action. If problems occur on

the Applicant's site, then the Applicant must control the dust, per the general Air Quality rules in 30 TAC §101. Noise from the vehicular traffic is covered by state and local ordinances. In the event that adjacent landowners are adversely affected by the Applicant's transportation of sludge, the draft permit does not limit the ability of nearby landowners to use common law remedies for trespass, nuisance, or other causes of action in response to activities that may or actually do result in injury or adverse effect on human health or welfare, animal life, vegetation, or property.

COMMENT 12:

Ms. Baker states that the Kentucky Branch Creek flows directly through the Applicant's proposed irrigation areas. Ms. Baker is concerned that there exists inadequate space, soil, vegetation, and other natural features between the proposed irrigation site and the creek to allow for proper attenuation of effluent from pollution.

RESPONSE 12:

Buffer zones exist in the draft permit to protect sensitive features from being potentially affected by the application of treated effluent. For example, Special Provision No.18 of the draft permit requires a minimum 50-foot buffer where application of effluent is prohibited on either side of all creeks, streams, or tributaries of Kentucky Branch Creek. In addition, Special Provision No. 20 requires a 500-foot buffer zone from the effluent irrigation site to all springs, as provided in 30 TAC §309.13(c)(3). The draft permit does not allow discharges into water in the state; discharges to ground or surface water occur constitute a permit violation and are subject to TCEQ enforcement action.

COMMENT 13:

Ms. Baker states that the Blanco County filings indicate that as presented, the sewage treatment plant, and irrigation fields may not be constructed in the location described by the Applicant and in accordance with the permit; consequently, Ms. Baker suggests that the draft permit should not be issued until the exact and final location for all wastewater facilities are determined.

RESPONSE 13:

The TCEQ regulations do not prevent the processing and issuance of a permit until exact and final locations for all wastewater facilities are determined. The required contents of a permit application, as stated in 30 TAC §305.45, include a "topographic map, ownership map, county highway map, or a map prepared by a registered professional engineer or a registered surveyor which shows the facility and each of its intake and discharge structures and any other structure or location regarding the regulated facility and associated activities." Additionally, the regulations require that the map depict the approximate boundaries of the Applicant's land to be used and sufficiently display each water in the state, roads, nature of land (developed or undeveloped), location of waste disposal activities not in the application, ownership of adjacent tracts, to name a few. The Applicant may designate the final location of wastewater facilities prior to permit issuance; however, if the locations change after permit issuance the Applicant must notify the TCEQ and amend the application.

COMMENT 14:

Mr. Venhuizen does not see a demonstration that the Applicant possesses either the technical or management expertise to execute the activities necessary to meet the permit requirements.

RESPONSE 14:

TCEQ rules do not require a prior demonstration of expertise to execute the activities necessary to meet the water quality permit; however, TCEQ does require that the plant is designed by a professional engineer and the Applicant must use a certified operator to operate the plant. By applying and signing the draft permit, upon issuance the Applicant becomes responsible for abiding by the permit limitations and certifying that the appropriately authorized individuals have designed and are operating the plant. Failure to abide by the permit requirements constitutes an enforceable violation.

COMMENT 15:

Mr. Venhuizen states his concern that the Applicant has not demonstrated a revenue stream and/or dedicated funds to assure fiscal capability to carry out the permit requirements.

RESPONSE 15:

The TCEQ regulations do not require a demonstration of fiscal responsibility by water quality permit applicants. An application fee is required for all permits and once paid and granted, the permit shall be issued for a period of three to five years. After permit issuance, the Applicant is responsible for adequately maintaining the facility and remaining in compliance with the permit conditions and regulations. Failure to do so, including financial irresponsibility, exposes the Applicant to potential enforcement action and constitutes cause for termination or suspension of the permit.

COMMENT 16:

Mr. Venhuizen believes that the Applicant's demonstration in the draft permit does not show how the soils used will be sufficient for the purpose of irrigation of treated effluent.

RESPONSE 16:

Information about the irrigation site soils were taken from the Natural Resources Conservation Service (NRCS), which identifies the types of soils in Blanco County and also identifies limitations of the soils for water uptake. Soil analyses identified as Eckrant 11A, 11B, and 11C; Krum 24A, 24B, and 24C; and Purves 38A, 38B, and 38C represent soil the soil sampling depths 0-6, 6-18 and 18-30. The data provided by NRCS indicate that the subject soils have a saturated permeability rate greater than the proposed application rate of treated effluent, meaning that that even during saturated conditions the soil will be able to handle the application rate of effluent application. Additionally, the data indicate that the top inches of subject soils can accommodate the proposed volume of treated effluent to be applied. The soil's ability to hold water and the saturated permeability rate indicate that even at the proposed maximum application rate, the irrigation of treated effluent should not result in ponding or runoff.

COMMENT 17:

Mr. David Venhuizen would like the Applicant to demonstrate adequate dispersal area presuming that the area remains unimproved, or alternatively to present a plan for improving the soils in the area. He also states that simply overseeding areas is quite unlikely to result in a uniform stand of Bermuda grass, especially since the soil depths are very shallow.

RESPONSE 17:

The adequacy of rooting depth is addressed in Response No. 27. Uniformity of the species of grass strand is not a regulatory requirement, yet if the cover crop is overseeded with Bermuda grass uniformity of grass strand is expected due to the nature of Bermuda grass growth. Additionally, conditions exist in the draft permit to ensure uptake of treated effluent and include monitoring requirements to assess whether treated effluent is being taken up by the crop cover. Special Provision No. 22 in the draft permit requires that the Applicant submit a crop management plan for review and approval prior to irrigation with treated wastewater, which would specify the type of crop cover and pounds of seed to cover the irrigation area. The TCEQ staff will look at the proposed cover crop and pounds of seed to determine whether the irrigation area will be adequately covered to help ensure uptake of treated effluent.

COMMENT 18:

Mr. Venhuizen states that there is no apparent nitrogen reduction capability in the proposed treatment process. The level of total nitrogen typically observed in domestic wastewater is 40 - 60 milligrams per liter (mg/l) with levels tending toward the top end for Texas. Mr. Venhuizen takes issue with the effluent nitrogen concentration stated at 10 mg/l rather than at least 40 mg/l for the proposed treatment process. Mr. Venhuizen further suggests that if the Applicant wishes to claim that the treatment system would indeed produce an effluent that has a significantly lower concentration than 40 mg/l of total nitrogen, then the TCEQ should include total nitrogen in the effluent set, at the concentration claimed in the land application analysis.

RESPONSE 18:

Based on its treatment plant manufacturer's estimate and Metcalf & Eddy (1991), the influent will have a total nitrogen concentration of 40 mg/l. A 25% reduction in total nitrogen can be achieved, according to Metcalf & Eddy (1991) Table 11-3. The Water Environment Federation Manual of Practice 8 (1998) provides an explanation for nitrogen removal in the activated sludge process. Before application, the application materials indicate an effluent total nitrogen concentration estimated at 30 mg/l, instead of the previously stated 10 mg/l. Assuming the nitrogen concentration is at 30 mg/L for the effluent, this would be well within the agronomic nutrient needs of the cover crop; for this reason, a total nitrogen in the effluent set is not warranted.

COMMENT 19:

Mr. Venhuizen claims that if the application is indeed uniform throughout the year, the majority of the effluent applied in the winter months would leach through the soil, or pond and runoff, violating the permit limits.

RESPONSE 19:

The water balance should be viewed as a tool from which information such as the effluent needed by the root zone for a particular month given the system efficiency can be obtained for irrigation management. The water balance should also be used in conjunction with the storage calculations in managing effluent application. If the effluent supplied is greater than the effluent needed by the root zone, part of the effluent supplied should be directed to storage to be drawn later to supply a deficit. Consequently, providing an effluent storage is part of the requirements of draft permit condition. Also, application of treated effluent may not be applied when the ground is frozen or saturated,

according to Special Provision No. 9.

COMMENT 20:

Mr. Venhuizen claims that the Soil Analysis Report provided by the Extension Service provided a recommended application of 20, 25, 30 pounds per acre (lb/acre) of nitrogen for a crop of bluestem (grazing or hay). Mr. Venhuizen states that the Applicant has not indicated that they are prepared to grow the crop. Mr. Venuizen also noted that the area depicted could not be cultivated without improvement, yet the land application analysis presumes that an application rate of 40 lb/acre of nitrogen would be applied, which is purported to be supported if the crop were "turf fairways, athletic fields, etc."

RESPONSE 20:

The application contains soil analyses and states that the irrigation area will be improved to a recreational land use as a golf course. The crop management plan will be submitted by the Applicant no later than 90 days after permit issuance and must include the type of cover crop to be utilized on the irrigation fields. There has not been an indication that bluestem crop will be utilized for the irrigation areas; the Soil Analysis Report states recommended applications for various types of cover crop regardless of whether it is utilized for the particular irrigation area.

COMMENT 21:

Mr. Venhuizen suggests that the Applicant should be required to provide a nitrogen analysis, which represents a more realistic situation. The nitrogen analysis would presume nitrogen uptake of the existing plant cover or the plant cover for which an explicit plan to install is offered, a presumption of at least 40 mg/l total nitrogen concentration in the system effluent, and monthly application rates that match the presumption in the monthly water balance calculations.

RESPONSE 21:

30 TAC §309.20(b)(3)(C) requires that the annual liquid loading not exceed that which would introduce more nitrogen than is annually required by the crop plus 20% volatilization. In a letter dated April 7, 2006, the Applicant provided an expected monthly application rate, using an effluent total nitrogen of 30 mg/l, as a function of the average monthly effluent application rates listed in Column 10 of Table 1, Monthly Water Balance, of the permit application. Using the formula provided in the regulations, the application rate, makeup of subject soil, and consumptive rate of the cover crop, the TCEQ staff has found that the 30 mg/L concentration of nitrogen in the treated effluent will be adequately taken up by the cover crop.

COMMENT 22:

Mr. Venhuizen states that there is major spring within several hundred feet of the dispersal area boundary and would like assurance from the Applicant that nitrogen would not leach at rates above the background level of total nitrogen presently in the spring flow and/or that the water leached from the dispersal area would not feed into the spring.

RESPONSE 22:

Special Provision No. 20 in the draft permit requires that the Applicant maintain a minimum of 500-foot buffer zone from the effluent application site to all springs in accordance with 30 TAC

§309.13(c)(3). Also, the proposed effluent application rate is less than the vertical rate water moves through the soils under saturated conditions. The application rate is low enough that it affords sufficient retention time for the proposed vegetated irrigation area to evapotranspirate the applied treated effluent. Vertical movement of nitrogen in the soil can only move as fast as the application rate of the added effluent. Since the application rate is less than the vertical movement of water in the soil under saturated conditions and the results of the water balance for this proposed site indicate that the added effluent will be evapotraspirated, movement of nitrogen is not expected beyond the root zone.

COMMENT 23:

Mr. Venhuizen claims that the monthly water balance does not account for the contribution of rainfall to the storage reservoir in Table 1.

RESPONSE 23:

TCEQ staff performs the water balance and storage calculations using net evaporation (evaporation minus rainfall), instead of gross evaporation values. The resulting hydraulic application rate is greater than the proposed effluent application rate, while the proposed storage is almost twice the calculated storage requirement. Therefore, the monthly water balance does account for rainfall to the storage reservoir.

COMMENT 24:

Mr. Venhuizen notes that the proposed dispersal area may not be completely available. Mr. Venhuizen asks how much of the actual area will be available for dispersal since the main stem of Kentucky Branch of the Blanco River flows through the area in question.

RESPONSE 24:

The total available area outside of the natural flow paths, excluding a 50-foot buffer on either side of the Kentucky Branch and its tributaries and slopes greater than twelve percent, has been calculated to be approximately 114.65 acres. The total available area is greater than the required 100 acres in the draft permit.

COMMENT 25:

Mr. Venhuizen notes that areas with slopes in excess of twelve percent may not be used as dispersal area and that there appears to be areas with slopes greater than twelve percent within the area specified by the Applicant as the dispersal area.

RESPONSE 25:

Special Provisions 21 and 22 prohibit irrigation with treated wastewater on areas with slopes greater than twelve percent. The NRCS require slopes in irrigation areas of no greater than fifteen percent; therefore, the proposed slope of no greater than twelve percent is a conservative requirement for slope. The application materials contain a topographic map from which slopes of the irrigation area were ascertained. If the irrigation areas were to exceed the permitted twelve percent slope in some areas, it remains below the NRCS' recommended fifteen percent.

COMMENT 26:

Mr. Venhuizen inquires about the specific hardware that would be used to execute the irrigation process, specifically how the hardware will be designed and controlled to provide uniform coverage over the dispersal area at the proper application rates. Mr. Venhuizen also inquires how the application rates would be determined so that runoff and pooling would be prevented.

RESPONSE 26:

At the engineering design stage, more detailed information about the hardware will be available; a detailed engineering plan must be submitted after permit issuance but before construction of the facility. In designing the treatment and irrigation facilities, the Applicant will adhere to the permit conditions, such as the effluent application rate, effluent limitations, buffer zone provisions, and irrigation practices.

COMMENT 27:

Mr. Venhuizen notes that the only factor considered was saturated hydraulic conductivity of the soils, which presumes the presence of a significant depth of soil and the Applicant has not demonstrated a significant depth of soil. Mr. Venhuizen also states that TCEQ presumes the annual average application rate in their calculations; however, as effluent would be stored during winter months and application volume would increase in summer, the application rate would have to increase and/or the application time would have to increase accordingly. Mr. Venhuizen states that the Applicant has not demonstrated sufficiently that application of treated effluent will not cause runoff or pooling of effluent.

RESPONSE 27:

The proposed application rate of treated effluent is less than the saturated conductivity rate of the soil. The presence of adequate soil depth has been identified by NRCS data and provided by site-specific soil samples by the Applicant as described in Response 16. The parameters provided in the application and NRCS data assume that if the Applicant operates within the permit limitations, that ponding or runoff of treated effluent will not occur. The application rate was based on the daily average flow rate proposed by the Applicant of 400,000 gallons per day. A total annual volume was calculated to determine the height of the water column.

Further, Special Provision 8 of the draft permit requires that irrigation practices shall be designed and managed so as to prevent ponding of effluent or contamination of ground and surface waters and to prevent the occurrence of nuisance conditions in the area. The Applicant's signature constitutes acknowledgment and agreement of compliance with all the terms and conditions embodied in the permit and the rules and other orders of the Commission. Failure to comply with the permit conditions constitutes an enforceable violation.

COMMENT 28:

Mr. Venhuizen wants confirmation of the following statement: "The water balance prepared by TCEQ staff confirms that an effluent application rate of 4.48 acre-feet per year per acre irrigated is possible at the proposed site and the storage calculations confirm that 110 days of storage is adequate for the proposed facility."

RESPONSE 28:

The TCEQ staff water balance and storage calculations are on file. The permit application file may be viewed at the TCEQ Office of the Chief Clerk, Bldg. F, 12100 Park 35 Circle, Austin, Texas 78753. A review of the water balance and storage calculations shows how the data above were derived.

COMMENT 29:

Mr. Venhuizen would like to know how the sludge management process would be managed so as to preclude the odor problem, pointing out that the contents of the sludge digester would be "disturbed" fifteen times during each removal event.

RESPONSE 29:

One of the alternatives to abate and control an odor nuisance is by providing a 150-foot buffer zone between the proposed wastewater treatment plant units and the property line. In addition, at the operational level, the Applicant shall comply with the draft permit's provision "to minimize or prevent any discharge or sludge use or disposal or other permit violation which has a reasonable likelihood of adversely affecting human health or the environment." The Applicant will observe this guideline in sludge management at the plant and shall prepare a sludge management implementation plan at detailed engineering design stage. The Applicant proposes aerobic sludge digestion, which consists of continuously aerating the sludge without the addition of new food other than the sludge itself. The provision of oxygen, through aeration, stabilizes the sludge and addresses odor problem as well. Further, the digested sludge draw off would be at the bottom of the digester and the sludge would then be transferred using a hose to a truck for hauling so that the potential for odor during transfer is eliminated.

COMMENT 30:

Mr. Venhuizen asks about the design features of the system that may minimize collection main leak, manhole overflow, and lift station failure. Mr. Venhuizen also asks about the level of management that would be applied to address these "vulnerabilities" and the implication to the overall ability of the system to perform "as advertised."

RESPONSE 30:

As indicated in Response 26, these analyses should be conducted at the detailed engineering design stage. The draft permit requires that prior to the construction of the interim I, interim II and final phase treatment facilities, the Applicant shall submit to the TCEQ a summary transmittal letter in accordance with the requirement in 30 TAC §317.1. This transmittal letter includes a certification by the design engineer that the plans and specifications are in compliance with all requirements of 30 TAC Chapter 317, Design Criteria for Sewerage Systems, and shall bear the signed and dated seal of the registered professional engineer responsible for the design. The design engineer is held to the Professional Conduct and Ethics to protect the health, safety, property and welfare of the public in the practice of the profession. In addition, 30 TAC Chapter 317 requires the testing of installed sewer pipe for leak and deflection and a separate testing for manholes for leakage. In the case of lift station, 30 TAC Chapter 317 requires that the pumping capacity will be such that the peak flow can be pumped to the desired destination with the largest pumping unit out of service.

COMMENT 31:

Mr. Venhuizen notes that the application clearly defines the function of the dispersal system to "disposal," implying that the point of the management system is to control a nuisance rather than to manage a resource. He also claims that while it is purported that the dispersal area would eventually be a golf course, the irrigation of which could be a beneficial reuse, there is no indication that this would eventually happen.

RESPONSE 31:

Although portions of the permit application that pertain to the utilization of the effluent are entitled "Land Disposal of Effluent" (Worksheets 3.0 and 3.1), to be consistent with the title of 30 TAC Subchapter C: Land Disposal of Sewage Effluent, the intent is not to dispose of "nuisance," but to "utilize effluent to supply the growth needs of the cover crop" (30 TAC §309.20(b)), which is clearly beneficial use of the effluent. Hence, the permit requires the submission for evaluation of a set of water balance and storage calculations, annual cropping plan, soil map and soil analysis, among others. It is the TCBQ staff's understanding that the front nine holes of the golf course are currently under construction.

COMMENT 32:

Mr. Venhuizen questions the ability of the proposed treatment process to operate so as to consistently and reliably produce any given level of effluent in the face of diurnal flow variations and during period when considerably less than full design flow is being received. Mr. Venuizen states that there is no operating theory for activated sludge that does not assume steady state flow and concludes that since the system would not receive steady state flow, there is no theoretical basis for expecting any specific level of performance.

RESPONSE 32:

Because of the uncertainty mentioned, i.e., flow variation, the design is not based on an absolute flow rate value, but on a statistical average, including a maximum value. Operating at less than full design flow shifts the mode of operation of the activated sludge process, as for example from conventional to extended aeration.

The proposed treatment process, the complete mix activated sludge, is not a new process. The existence of variations in contributory flows has long been recognized and operational strategies have been developed. This process traces its growth in the 1970s and 1980s (Metcalf & Eddy, 2003). There exist several operating complete mix activated sludge plants in Texas that meet their effluent limits.

COMMENT 33:

Mr. Venhuizen claims that the Applicant does not have a Certificate of Convenience and Necessity (CCN) for the area to be served by the proposed system. He states that the application for a sewer CCN is contested, so that unless the CCN is granted, the wastewater permit application is "moot."

RESPONSE 33:

The sole protestant to the CCN application, Ms. Shirley Beck, has formally withdrawn her protest. The Applicant must have both the CCN and the wastewater permit before commencement of operation, irrespective of order of issuance.

CHANGES MADE TO THE DRAFT PERMIT IN RESPONSE TO COMMENT

No changes to the draft permit have been made in response to public comment.

Respectfully submitted,

Texas Commission on Environmental Quality

Glenn Shankle
Executive Director

Stephanie Bergeron Perdue, Deputy Director Office of Legal Services

Robert Martinez, Director Environmental Law Division

Pinar Dogru, Staff Attorney Environmental Law Division State Bar No. 24040819 P.O. Box 13087, MC 173 Austin, Texas 78711-3087 (512) 239-0144

REPRESENTING THE
EXECUTIVE DIRECTOR OF THE
TEXAS COMMISSION ON
ENVIRONMENTAL QUALITY

CERTIFICATE OF SERVICE

I certify that on September 21, 2006, the "Executive Director's Response to Public Comment" for Permit No. WQ0014615001 was filed with the Texas Commission on Environmental Quality's Office of the Chief Clerk.

Pinar Dogru, Staff Attorney Environmental Law Division State Bar No. 24040819 人名英格里特拉 化多点线 人名

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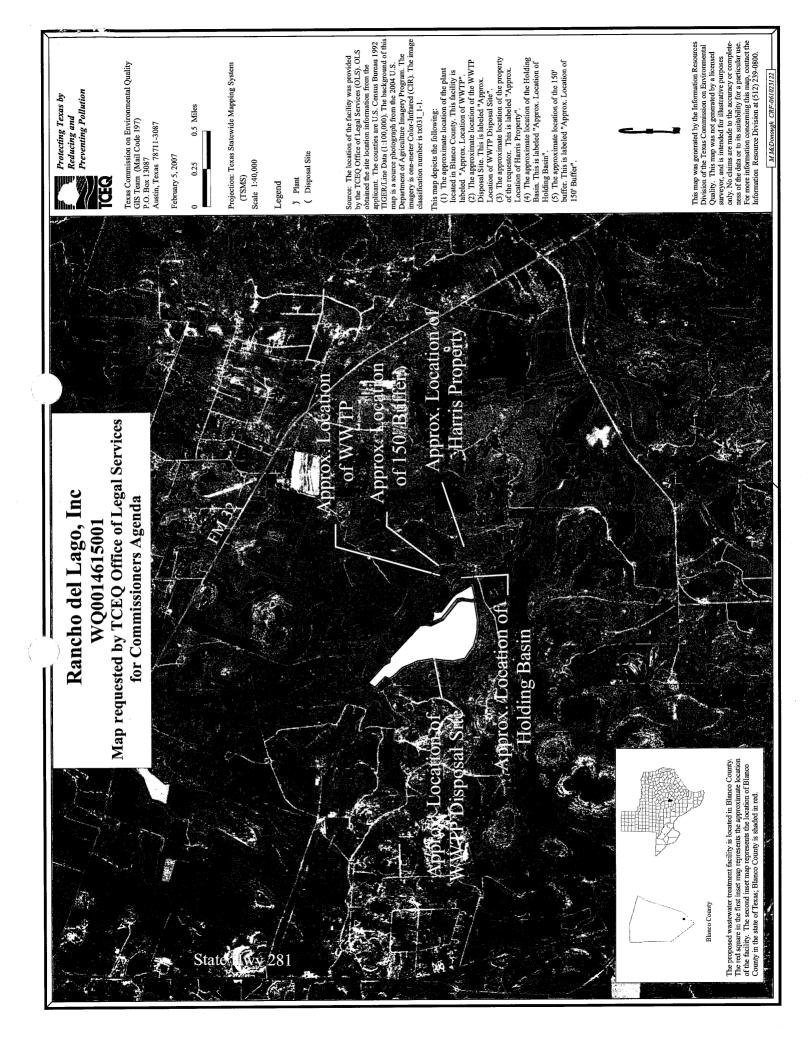
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ATTACHMENT C

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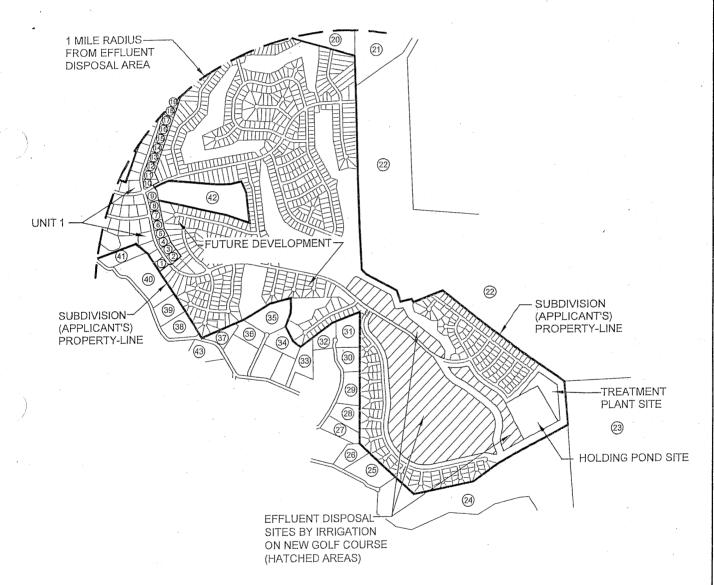


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SCALE: 1"=2000'



HILL COUNTRY ENGINEERING, LLC

7927 VISTA MONTAN SAN ANTONIO, TX 78256 (210) 698-9479 ROCKIN J RANCH SEWAGE TREATMENT FACILITY
BLANCO COUNTY, TEXAS
DOMESTIC WASTEWATER PERMIT APPLICATION

AFFECTED LANDOWNER'S MAP

#	DATE	REVISION
DA	ATE: 8	JUNE 05

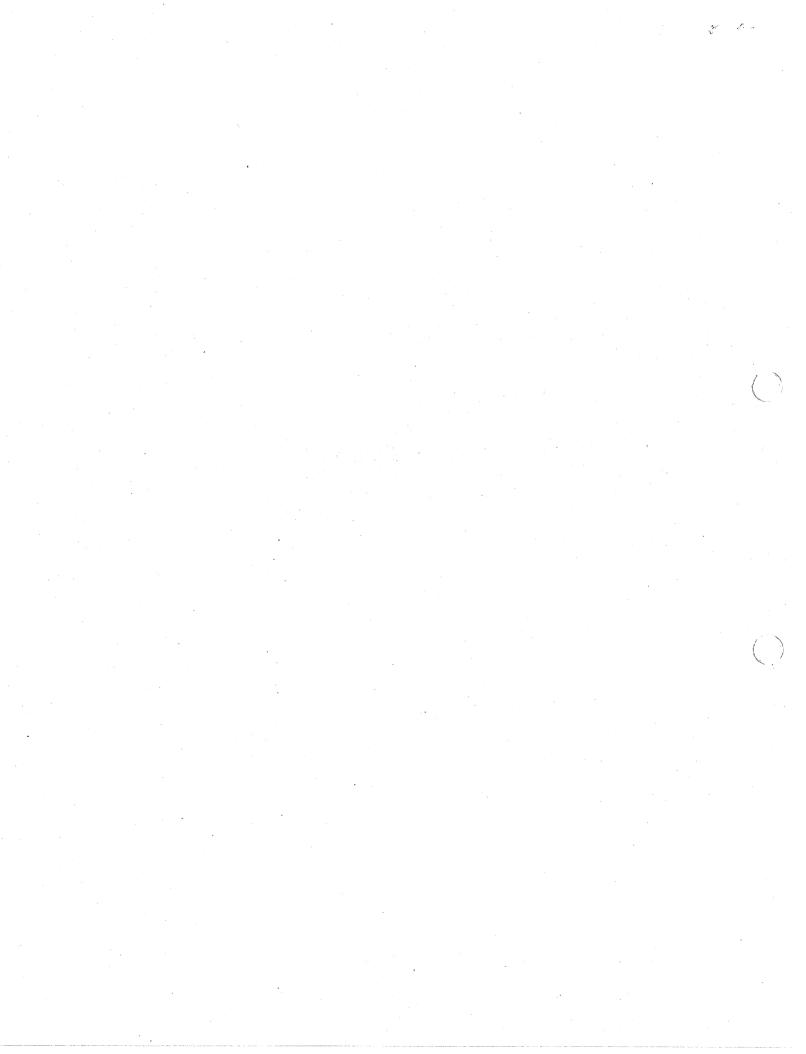
Rockin J Ranch Sewage T ...ment Facility Domestic Wastewater Permit Application 8 June 2005

Affected Landowner's Map Key

- 1. Mr. & Mrs. Steve Garcia 16023 Watering Point San Antonio, TX 78247
- 2. Mr. & Mrs. William Campbell 12125 Jones Maltsburger #204 San Antonio, TX 78247
- 3. Mr. & Mrs. Bryan Gray 9009 FM 620 N. #2206 Austin, TX 78726
- 4. Lance Harris 8910 N. Loop 1604 W. #1025 San Antonio, TX 78249
- 5. Jesus Ojeda 4730 Casa Verde St. San Antonio, TX 78233
- 6. Rockin' J Ranch PO Box 2202 Canyon Lake, TX 78133
- 7. Rockin' J Ranch PO Box 2202 Canyon Lake, TX 78133
- 8. Mr. & Mrs. Leonardo Soto PO Box 362 Poth, TX 78147
- 9. Mr. & Mrs. Aaron Stass 2300 Nacogdoches #140J San Antonio, TX 78209
- Mr. & Mrs. Chad Thompson
 1522 Danehill Dr.
 San Antonio, TX 78253
- 11. Mr. & Mrs. Chad Thompson 1522 Danehill Dr. San Antonio, TX 78253
- 12. Mr. & Mrs. Christopher Vickmark 83 Booker Palm San Antonio, TX 78239

- Mr. & Mrs. Christopher Vickmark
 83 Booker Palm
 San Antonio, TX 78239
- 14. Mr. & Mrs. William Himstedt 8627 Belhaven San Antonio, TX 78250
- 15. Tony Padron 1301 Esperanza Avenue McAllen, TX 78501
- Mr. & Mrs. Larry Rothfuss
 420 Dickman Road
 San Antonio, TX 78234
- 17. Mr. & Mrs. David Casey 22331 Navasota Circle San Antonio, TX 78259
- 18. Mr. & Mrs. David Casey 22331 Navasota Circle San Antonio, TX 78259
- 19. Mr. & Mrs. Mario Lopez 9805 Misty Plain Drive San Antonio, TX 78245
- 20. Melinda Wesner5123 PineBellaire, TX 77401
- 21. Anne Deford 2254 RR 32 Blanco, TX 78606
- 22. Shirley Beck 641 White Springs Ranch Rd. Blanco, TX 78606
- 23. Harris Family Ranch LTD. 301 Bent Tree Ct. Austin, TX 78746
- 24. Larry Little 6737 Poss Road San Antonio, TX 78238

ATTACHMENT D



Compliance History

Custome	er/Respondent/Owner-Operator:	CN600626253	Rancho	Rancho Del Lago, Inc.			Classification: AVERAGE		Rating: 3.34	
Regulated Entity:		RN104666383	ROCKÍN J RANCH SUBDIVISION SEWAGE TREATMENT FACILITY PERMIT		Classification: AVERAGE		Site Rating: 3.01			
		WASTEWATER			FACILITY PERMIT	BY DEFAULT		WQ0014615001		
ID Numb	per(s):								-	
Location:		APPROX 3.9 MI S 52	APPROX 3.9 MI SE OF INTERSECTION SH 281 AND FM				Rating Date: 9/1/2006 Repeat Violator: NO			
TCEQ R	egion:	REGION 11 - AUS	STIN							
Date Cor	mpliance History Prepared:	February 06, 2007								
Agency [Decision Requiring Compliance History:	Permit - Issuance, renewal, amendment, modification, denial, suspension, or revocation of a permit.								
Compliance Period:		April 18, 2000 to February 06, 2007								
TCEQ St	aff Member to Contact for Additional Infor	mation Regarding this	Complianc	e History						
Name:	J. D. Centeno, Jr.	Pho	one:	239-4608						
					· ·					
			-	ce History Com	ponents					
	e site been in existence and/or operation t				Yes					
	ere been a (known) change in ownership of who is the current owner?	or the site during the co	ompilance	period?	No					
) i	who was/were the prior owner(s)?				N/A					
			,	•	N/A					
	did the change(s) in ownership occur?				N/A			_		
-	nents (Multimedia) for the Site :									
Α.	Final Enforcement Orders, court judgen	nents, and consent dec	rees of the	state of Texas an	d the federal gove	ernment.				
	N/A									
В.	Any criminal convictions of the state of	Fexas and the federal g	governmen	t						
	N/A									
C.	Chronic excessive emissions events.									
	N/A									
D.	The approval dates of investigations. (C	CEDS Inv. Track. No.)				•				
E.	Written notices of violations (NOV). (CC	EDS Inv. Track. No.)								
),	•	•								
/	Environmental audits. N/A		•				•			
G.	Type of environmental management sys	tems (EMSs).								
	N/A									
Н.	Voluntary on-site compliance assessmen	nt dates.								
•	N/A	f .				•				
l.	Participation in a voluntary pollution redu	iction program.					•			
	N/A									
J.	Early compliance.									
	N/A									
Sites Outs	side of Texas				•					
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